

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference



### Abstract

This document describes the requirements for Syria Telecom that will be covered by the CCBS Transformation Project to enhance the existing Customer Care and Billing System

Prepared (Subject resp)		No.		
Marwan Khoury		1029-FCP 132 1747		
Approved (Document resp)	Checked	Date	Rev	Reference
Ziad Hobeika		2018-07-10	D	

## Table of Contents

<b>1</b>	<b>Introduction .....</b>	<b>4</b>
1.1	Document Overview .....	4
1.2	Purpose.....	4
<b>2</b>	<b>Application Requirements.....</b>	<b>5</b>
2.1	Architectural Block BSCS .....	5
2.1.1	Customer Information Management .....	5
2.1.2	Catalog Management .....	11
2.1.3	Rating and Balance Management .....	24
2.1.4	Core Billing and Invoice .....	35
2.1.5	Finance .....	49
2.1.5.1	Tax Accounting.....	49
2.1.5.2	General Ledger Accounting .....	54
2.1.5.3	Treasury .....	56
2.1.6	Payments .....	58
2.1.7	Credit & Collection Management .....	75
2.1.8	Revenue Assurance .....	97
2.1.9	Big Data Analytics and Business Intelligence .....	98
2.2	Architectural Block EMM .....	123
2.2.1	Usage Collection .....	123
2.2.1.1	Network Billing Usage Collection & Mediation .....	123
2.2.2	Non-Functional Requirements .....	155
2.3	Architectural Block Bpmonline .....	156
2.3.1	Contact Center .....	156
2.3.1	Customer Assurance .....	170
2.3.2	Customer Information Management .....	176
2.3.3	Identity Management .....	228
2.3.4	Information Management.....	229
2.3.5	Resource Management and Control .....	229
2.3.6	Service and Resource Assurance .....	230
2.3.7	Core Billing and Invoice .....	230
2.3.8	Big Data Analytics and Business Intelligence .....	232
2.4	Architectural Block BIL .....	242
2.4.1	Order Capture and Verification .....	242
2.4.2	Big Data Analytics and Business Intelligence .....	264
2.4.3	Non-Functional Requirements .....	268
2.5	Architectural Block EMA .....	268
2.5.1	Service & Resource Orchestration.....	268
2.5.2	Non-Functional Requirements .....	297
2.6	Architectural Block XAKTA .....	298
2.6.1	Number Management.....	298
2.6.2	Inventory Management.....	302
2.6.3	Contact Center .....	324
2.6.4	Identity Management .....	325
2.6.5	Big Data Analytics and Business Intelligence .....	326
<b>3</b>	<b>Reference .....</b>	<b>340</b>

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

## Revision History

S.No	Date	Change Description	Document Version	Prepared By/Modified By
1	24-Jan-2018	First Release	A	Marwan Khoury
2	21-Apr-2018	Changes implemented according to customer's comment on RevA	B	Marwan Khoury
3	26-May-2018	Modifications based on customer comments on RevB	C	CCBS Team
4	14-Jun-2018	Modifications based on customer comments on RevC, and workshop held from 04062018 to 07062018,	PD1	CCBS Team
5	21-Jun-2018	Modification based on conference call held on 26062018 and agreed between Ericsson and ST Management	PD2	CCBS Team
6	28-Jun-2018	Added the reports that were agreed by ST and Ericsson to be handled in the current UR	PD3	CCBS Team
7	09-Jul-2018	Fixed typos and contradictions. Updated the Tax Matrix as per ST's input Updated the Switches MML Commands sheet as per ST's input Minor changes as per ST's input	PD4	CCBS Team
8	10-Jul-2018	Fixed typos. Changes as per ST's input on PD3 for CRM	D	CCBS Team

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

## 1 Introduction

This document defines the User Requirements (URs) in the Application area for Project ST CCBS Transformation.

### 1.1 Document Overview

The content in this document is divided into the following sections:

- Section 1: This introduction, which outlines
  - o Structure of the document,
  - o Purpose of the URs for Application.
- Section 2: Identifies URs for Application. It is structured in the following Sub-Sections
  - o Section 2.1: Architectural Block BSCS
  - o Section 0: Architectural Block EMM
  - o Section 2.3: Architectural Block bpmonline
  - o Section 2.4: Architectural Block BIL
  - o Section 2.5: Architectural Block EMA
  - o Section 2.6: Architectural Block XAKTA
- Section 3: Provides reference documents for the User Requirements

### 1.2 Purpose

The purpose of this document is to correctly identify and describe URs for Application.

This aims to set correct expectations right from the start of the project, by getting an early agreement and consensus from stakeholders.


On this basis, detailed Interface requirements will be stated later in LLD documents for the Application


Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

## 2 Application Requirements

### 2.1 Architectural Block BSCS

#### 2.1.1 Customer Information Management

<b>ID#: BSCS-CIM-001</b>	<b>Raised By: -</b>
<b>UR: Customer Statuses</b>	
<b>Current Flow:</b>  The statuses Active and Suspended are available.	
<b>Detailed Requirement:</b>  The billing system should support the following customer status: <ol style="list-style-type: none"> <li>Prospect</li> <li>Active</li> <li>Suspended</li> <li>Deactivated</li> </ol>	
 <i>Note:</i>	

<b>ID#: BSCS-CIM-002</b>	<b>Raised By: -</b>
<b>UR: Customer Status Changes</b>	
<b>Current Flow:</b>  N/A	
<b>Detailed Requirement:</b>  The following changes in the customer statuses shall be possible <ul style="list-style-type: none"> <li>Prospect to (Active or Deactivated)</li> <li>Active to (Suspended or Deactivated)</li> <li>Suspended to (Active or Deactivated)</li> </ul>	
 <i>Note:</i>	

<b>ID#: BSCS-CIM-003</b>	<b>Raised By: -</b>
<b>UR: Customer Status Prospect</b>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference


**Current Flow:**


N/A

**Detailed Requirement:**


A subscriber is considered as Prospect when he/she does not have subscription. This is the initial status for prospective customers. The customer automatically receives this status during the creation of a customer when the customer data is saved for the first time.

 Note:

<b>ID#: BSCS-CIM-004</b>	<b>Raised By: -</b>
<b>UR: Customer Status Active</b>	
<b>Current Flow:</b>	
Customers who are using services in the network are in 'active' status.	
<b>Detailed Requirement:</b>	
All customers who are using services in the network must be in 'active' status. Contracts cannot be assigned to a customer unless the customer is active.	
 Note:	

<b>ID#: BSCS-CIM-005</b>	<b>Raised By: -</b>
<b>UR: Customer Status Suspended</b>	
<b>Current Flow:</b>	
N/A	
<b>Detailed Requirement:</b>	
Customers with this status are temporarily barred from using the network. All the customer's contracts must be suspended before a customer can be suspended. A suspended customer will not be able to order any service or have a new contract.	
 Note:	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

<b>ID#: BSCS-CIM-006</b>	<b>Raised By: -</b>
<b>UR: Customer Status Deactivated</b>	
<b>Current Flow:</b>  N/A	
<b>Detailed Requirement:</b>  Customers in this status are no longer customers. They are left in the system for historical information. It is not possible to reactivate or delete a deactivated customer	
 <i>Note:</i>	

<b>ID#: BSCS-CIM-007</b>	<b>Raised By: -</b>
<b>UR: Customer Groups Definition</b>	
<b>Current Flow:</b>  In existing architecture, CRM has a list of customers' categories that are defined in BSCS and defined again in CRM system, CRM filters the allowed rate plans for the subscription based on customer category, while dunning module counts on customer's category to exclude the customer from dunning module. Customer groups in CRM: <ol style="list-style-type: none"> <li>1. Official</li> <li>2. Private</li> <li>3. STE Coin Box</li> <li>4. STE Internal</li> <li>5. Public company</li> <li>6. Private Company</li> <li>7. Journalist</li> <li>8. Embassy</li> <li>9. Bourak coin box</li> <li>10. STE Employee</li> <li>11. Rural coin box</li> <li>12. Telecom Ministry Employee</li> <li>13. STE Manager</li> <li>14. STE Director</li> <li>15. FTTB private</li> <li>16. FTTB company</li> <li>17. FTTB official</li> </ol>	


Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

### Detailed Requirement:

Target system shall define a list of Customer Groups along with the allowed rate plans for each group. The system shall offer user interface to define new customer groups and linking of rate plans to customer groups. The same user interface shall be used for modification of existing customer groups and mapping to rate plans.

Below are the customer category to be configured in target system.

1. Normal
2. Martyr Families
3. Journalist
3. ST Employee
4. ST Director
5. Eminent Carrer
6. Business\_Associations parties & Agencies
8. Small Offices Home Offices
9. Medium Company
10. Large Company
11. Eco-Official-Official
12. Eco-Official-Official\_Special
13. Eco-Official-Official\_Special\_Deal
14. Eco-Official-Pay-invoices
15. Eco-Official-Telecom\_offices\_ST\_Offices
16. Admin-Official-Official
17. Admin-Official-Official\_Special
18. Admin-Official-Official\_Special\_Deal
19. Admin-Official-Pay-invoices
20. Admin-Official-Telecom\_offices\_ST\_Offices
21. Government employee or diplomat
22. Embassy
23. Key Account
24. ST Manager

 Note:

<b>ID#: BSCS-CIM-008</b>	<b>Raised by: -</b>
<b>UR: Product Eligibility Rules</b>	
<b>Current Flow:</b>  Product eligibility rules are maintained and applied in CRM system. The rules are as follows: <ol style="list-style-type: none"> <li>a. Rate plans are allowed based on the customer category to which the customer belongs</li> </ol>	




Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference


- b. Services are allowed based on the contracted rate plan of the customer.
- c. Operations allowed based on customer status [Active / Prospect / Blacklisted]
- d. Existing services and new services are subject to mutually exclusivity check.

**Detailed Requirement:**

Target system shall provide the capability to define

- Product eligibility rule which will include Customer group and rate plan mapping.
- Services Dependencies where contracting a specific service require the existence of another
- Services Consistency where contracting a specific service excludes the possibility of contracting another


 Note:

<b>ID#: BSCS-CIM-010</b>	<b>Raised by: -</b>
<b>UR: Customer and Contract CSO information</b>	
<b>Current Flow:</b>	
At present the CSO information is available at customer level.	
<b>Detailed Requirement:</b>	
System shall capture the CSO information at both customer and contract level. The significance is to present CSO information of two separates contracts under single customer, where in each contract belongs different region falling under separate CSO.	
 Note:	

<b>ID#: BSCS-CIM-011</b>	<b>Raised By: -</b>
<b>UR: Contract Deactivation with a Reason</b>	
<b>Current Flow:</b>	
<b>Detailed Requirement:</b>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

Target solution shall offer to select one reason while deactivating a contract. The reason(s) shall be configurable and shall be available to be chosen from at the time of contract deactivation. The reason shall present the purpose behind the contract deactivation.

 *Note:*

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

### 2.1.2 Catalog Management

The Catalog Management include repositories of product and services listing within ST and include the ability to design, create, augment and map new entities and supporting data. Additional aspects include versioning, change management, enhanced viewing, as well as editing and tracking capabilities.

<b>ID#: BSCS-CMG-001</b>	<b>Raised by: -</b>
<b>UR: Product Management</b>	
<b>Current Flow:</b>  MP online module in BSCS billing system is used for service and rate plan life cycle management [Create/Delete]. There is no exact business process to deactivate or discontinue specific service or rate plans for future use	
<b>Detailed Requirement:</b>  The target system should provide an application for life cycle management of services and rate plans.	
<i>Note:</i>	

<b>ID#: BSCS-CMG-002</b>	<b>Raised by: -</b>
<b>UR: Launch of New product</b>	
<b>Current Flow:</b>  ST marketing team provides details of service and rate plan(s) along with GL codes for ST IT team whenever a new service or rate plan is to be introduced. ST IT team configure the new service and/or rate plan(s) in billing system using MP online module with the provided starting date indicating the availability of the offer to ST customer.	
<b>Detailed Requirement:</b>  The billing system should provide an application for creation of new service/rate plan(s) with starting date of the product. Receiving the details of new service/rate plan(s) from ST marketing team is a manual action, outside the target system.	
<i>Note:</i>	

Prepared (Subject resp)		No.		
Marwan Khoury		1029-FCP 132 1747		
Approved (Document resp)	Checked	Date	Rev	Reference
Ziad Hobeika		2018-07-10	D	

<b>ID#: BSCS-CMG-003</b>	<b>Raised by: -</b>
<b>UR: Listing Products</b>	
<b>Current Flow:</b>  The newly created service and/or rate plan(s) are mirrored to CRM system using scripts allowing the use of the newly launched product in CRM.	
<b>Detailed Requirement:</b>  The target system shall offer a SOI or W/S interface allowing the CRM system to fetch the latest service/rate plan(s) published in BSCS.	
<i>Note:</i>	

<b>ID#: BSCS-CMG-004</b>	<b>Raised by: -</b>
<b>UR: Number of Rate Plans</b>	
<b>Current Flow:</b>  There are 164 numbers of rate plans defined, those are used for offline charging for post-paid usage events and non-network events.	
<b>Detailed Requirement:</b>  The target system should define all existing rate plans, which will continue to be offered.	
<i>Note: Details of rate plans will be available in product catalogue sheet attached in the Reference 2</i>	

<b>ID#: BSCS-CMG-005</b>	<b>Raised by: -</b>
<b>UR: Telephony Service</b>	
<b>Current Flow:</b>  The Telephony service is charged for the usage. The Telephone network usage is categorised as local, national, International, Mobile usage, IN service usage and short-code usage based on calling zone.	
<b>Detailed Requirement:</b>  The target system should meet define Telephony as a network service and offered as part of a rate plan. The charges of the service usage will be determined based on zones.	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference


*Note: IN services usage is captured in a separate requirement.*


<b>ID#: BSCS-CMG-006</b>	<b>Raised by: -</b>
<b>UR: Usage Charge Legs</b>	
<p><b>Current Flow:</b></p> <p>Only Telephony service has network usage and is charged for the usage. Usage charge is calculated in the 'base charging (AIR)' leg of the rating package by default. There are certain cases where a second charge is calculated for 'Interconnect Leg' in rating package, which leads to two charge parts in the resulting UDR. The telephony calls that falls into the following zones are calculated for Interconnect leg charge:</p> <ul style="list-style-type: none"> <li>- International Calls Zone1</li> <li>- International Calls Zone2</li> <li>- International Calls Zone3</li> <li>- International Calls Zone4</li> <li>- International Calls Zone5</li> <li>- International Calls Zone6</li> <li>- International Calls Zone9</li> <li>- Internet Zones</li> <li>- Mobile Zones</li> <li>- Prepaid Zone1</li> </ul>	
<p><b>Detailed Requirement:</b></p> <p>The target system should have single leg in rating packages which will define all charges for all calls. Interconnects charges will be separately handled as part Interconnect business configuration outside the target system</p>	
<p><i>Note:</i></p>	

<b>ID#: BSCS-CMG-007</b>	<b>Raised by: -</b>
<b>UR: Calling Zones</b>	
<p><b>Current Flow:</b></p> <p>Multiple zones are setup based on the destination of the telephone call. Charge of the calls are based on the zones.</p>	
<p><b>Detailed Requirement:</b></p> <p>The target system should define the following zones for Telephony service usage:</p>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

- a. Local Zone – for calls originating and terminating within the same province
- b. National Zone – for calls originating and terminating out the same province.
- c. International Zone(s)- for calls to foreign country
- d. GSM Zone- for calls terminating to Mobile phone with-in country
- e. Prepaid Zone- for IN services like FPH, VPN
- f. Short Number Zone – for calls to short numbers

 Note: Details of Calling zone will be available in product catalogue sheet attached in the Reference 2

<b>ID#: BSCS-CMG-008</b>	<b>Raised by: -</b>
<b>UR: Calling Times</b>	
<b>Current Flow:</b>  Multiple time slots (time packages) are setup to have separate prices for the calls based on the timing of the call.	
<b>Detailed Requirement:</b>  Target system shall offer the capability to set up time interval based on business requirements. For the details of time intervals set up in target system please refer the product catalogue attached in the Reference 2.	
 Note: Details of Calling times will be available in product catalogue sheet attached in the Reference 2	

<b>ID#: BSCS-CMG-009</b>	<b>Raised by: -</b>
<b>UR: Special Day(s)</b>	
<b>Current Flow:</b>  Apart from weekdays definition (Sunday to Thursday), special days are defined. These special days influence the charge of the telephone service.	
<b>Detailed Requirement:</b>  Target system shall offer the capability to define special days based on business requirements. For the details of special days set up in target system please refer the product catalogue attached in the Reference 2.	

Prepared (Subject resp)		No.		
Marwan Khoury		1029-FCP 132 1747		
Approved (Document resp)	Checked	Date	Rev	Reference
Ziad Hobeika		2018-07-10	D	


*Note: Details of Special days will be available in product catalogue sheet attached in the Reference 2*


<b>ID#: BSCS-CMG-010</b>	<b>Raised by: -</b>
<b>UR: Promotion Products</b>	
<b>Current Flow:</b>  Promotion products are managed via MI online module in BSCS billing system. Promotions with both Implicit and Explicit assignment types are setup. Explicit promotions are assigned to customer via manual script execution within the billing system.	
<b>Detailed Requirement:</b>  The target system should allow: <ol style="list-style-type: none"> <li>Administration of promotion products of both implicit and explicit assignment type.</li> <li>Defining each promotion with its own set of conditions (evaluation and application and item qualifier sets)</li> <li>Defining each promotion with definite availability period like during Alfater eid, expo period.</li> <li>Defining promotions that provide discounts on subscription charges and usage charges.</li> <li>Promotion action i.e. discount to be applied to the customer during billing cycle</li> </ol>	
<i>Note: Details of promotions will be available in product catalogue sheet attached in the Reference 2.</i>	

<b>ID#: BSCS-CMG-011</b>	<b>Raised by: -</b>
<b>UR: Free Units</b>	
<b>Current Flow:</b>  With the current system, free unit of 120 local calls and 10 minutes national calls in month are configured.	
<b>Detailed Requirement:</b>  The target system should allow: <ol style="list-style-type: none"> <li>Free unit products to be implicitly applied to customer via rate plans.</li> <li>Free unit to be provided in terms of voice minutes</li> <li>Free unit [voice minutes] to be categorised as national and local.</li> </ol>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

- d. Free unit period to be aligned with billing cycle. Example: 20 national minutes and 120 local minutes in one bill cycle for Private customer
- e. Separate free unit products to be managed for private customer and ST employee.

 *Note: Details of free unit products is available in product catalogue sheet attached in the Reference 2*

<b>ID#: BSCS-CMG-012</b>	<b>Raised by: -</b>
<b>UR: Promotion Assignment Mode</b>	
<b>Current Flow:</b>  Promotion products with assignment type Implicit and 'Explicit Interactive' exist. Implicit promotions are available to all customers via selection criteria. In case explicit promotion products, assignment is done via scripts that make changes in BSCS database allowing the promotion to consider the specified customers during billing cycle.	
<b>Detailed Requirement:</b>  The target system should allow: <ul style="list-style-type: none"> <li>a. Defining promotion packages with assignment type Implicit. Applying the promotion implicitly to customers should be based on set of satisfied conditions.</li> <li>b. Defining promotion packages with assignment type explicit interactive. Applying the promotion explicitly to customers should be a manual action done by the CSR.</li> </ul> The evaluation and application of contract assigned promotions packages shall be at the time of billing cycle. The application period of the promotion package shall be defined with in the promotion package definition in the following options: <ul style="list-style-type: none"> <li>a. as absolute period with start date and end date of application</li> <li>b. as relative period with start date (=assignment date + waiting period) and active period.</li> </ul>	
 <i>Note:</i>	

<b>ID#: BSCS-CMG-013</b>	<b>Raised by: -</b>
<b>UR: Network Service</b>	
<b>Current Flow:</b>	





Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference


Services defined in BSCS as network services are services provisioned in the network.

**Detailed Requirement:**


The target system should allow defining services as network services whenever those services require provisioning of a network element.


 *Note: Details of the service list is available in the product catalogue sheet.*

<b>ID#: BSCS-CMG-014</b>	<b>Raised by: -</b>
<b>UR: Advanced Recurring Charge</b>	
<p><b>Current Flow:</b></p> <p>Recurring charges are charged to customers post the billing run. Advance recurring charge is not used in ST.</p>	
<p><b>Detailed Requirement:</b></p> <p>The target system shall charge the monthly fee to customer post the billing cycle. Charging the monthly recurring charges in advance for ST customers should be supported in the target.</p>	
<p> <i>Note:</i></p>	

<b>ID#: BSCS-CMG-015</b>	<b>Raised by: -</b>
<b>UR: Gross/Net Pricing</b>	
<p><b>Current Flow:</b></p> <p>All prices defined in rate plans in BSCS billing system are net prices, excluding taxes.</p>	
<p><b>Detailed Requirement:</b></p> <p>The target system should define service charges [usage / access / subscription] as net in rate plans.</p>	
<p> <i>Note:</i></p>	

Prepared (Subject resp)		No.		
Marwan Khoury		1029-FCP 132 1747		
Approved (Document resp)	Checked	Date	Rev	Reference
Ziad Hobeika		2018-07-10	D	

<b>ID#: BSCS-CMG-016</b>	<b>Raised by: -</b>
<b>UR: Subscriber Base</b>	
<b>Current Flow:</b>  <p>The products and their status are stored only in BSCS. Mandatory services are mirrored to CRM and they are added to each subscription request in CRM system. For the subscriber products, they are stored only in BSCS (services), and CRM reads them from BSCS direct.</p>	
<b>Detailed Requirement:</b>  <p>The target system should comply to the followings:</p> <ul style="list-style-type: none"> <li>a. All product/services should be managed only in billing system</li> <li>b. Most of the subscriber details including their product information should be stored in billing system</li> <li>c. All subscriber demographic details should be stored on the CRM</li> <li>d. The subscriber billing information should be available to CRM from billing system via offered interface.</li> </ul>	
 <i>Note:</i>	

<b>ID#: BSCS-CMG-017</b>	<b>Raised by: -</b>
<b>UR: Mandatory Service</b>	
<b>Current Flow:</b>  <p>Each rate plan has few mandatory services like Telephony service and some stamps fee services.</p>	
<b>Detailed Requirement:</b>  <p>The target system should provide the option to set a service or set of services(s) as mandatory service in a rate plan. These mandatory services should be active by default for a subscription without explicit assignment.</p>	
 <i>Note: Details of mandatory service(s) for each rate plan is provided in product catalogue.</i>	

<b>ID#: BSCS-CMG-018</b>	<b>Raised by: -</b>
<b>UR: ISP Ordering ADSL</b>	
<b>Current Flow:</b>  	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

In the existing solution, ISPs sell ADSL service to ST customers and manage the customers on their own system. However, ISPs do pass on the information of phone number and service list of customers to ST. A special service (ADSL subscription - ISP) is contracted to such customers as an identification label. This service has a subscription fee [and no access fee] which is charged to the customer. The access charge for the ADSL service is charged by ISP in its own system, out of CCBS solution.

### Detailed Requirement:


Target solution shall offer one service 'ISP ADSL' as part of product catalogue. The service 'ISP ADSL' shall accept one parameter for ISP.

The solution shall activate 'ISP ADSL' service in the Telephony contract of a customer, when the customer gets a new ADSL connection from private-ISP.

The solution shall post OCC for the Installation charge of the xDSL installation and shall be available in the customer's telephony contract invoice, where cashier is not available to collect upfront payment.

The solution shall accept installation charge of the xDSL connection in CASH as upfront payment, where cashier is available to collect the payment.

 Note:

<b>ID#: BSCS-CMG-020</b>	<b>Raised by: -</b>
<b>UR: Product Localization</b>	
<b>Current Flow:</b>	
TR online module application in BSCS billing system is used for Arabization of the items [Service, Rate plans].	
<b>Detailed Requirement:</b>	
The target system should provide the function for Arabization of product configuration items [Service, Rate plans, Zones, Country, Promotions].	
 Note: An excel sheet is attached in Reference section with details of which items shall be translated.	

<b>ID#: BSCS-CMG-021</b>	<b>Raised by: -</b>
<b>UR: ST ISP Data Service</b>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference


**Current Flow:**

Data service offered by ST ISP (Tarasul) is charged based on subscription and access fees.

**Detailed Requirement:**

The target system should define Data service offered by ST ISP (Tarasul) as a network service and offer it as part of a rate plan where its charging will be based on consumed volume (uplink and downlink).


 Note:

<b>ID#: BSCS-CMG-022</b>	<b>Raised by: -</b>
<b>UR: Private ISP Data Service</b>	
<b>Current Flow:</b>	
Data service offered by Private ISPs is charged based on subscription fee.	
<b>Detailed Requirement:</b>	
Data service offered by Private ISPs shall be charged based on subscription fee.	
 Note:	

<b>ID#: BSCS-CMG-024</b>	<b>Raised by: -</b>
<b>UR: Tiered Discount Based on number of Contracts</b>	
<b>Current Flow:</b>	
<b>Detailed Requirement:</b>	
System shall offer the possibility to grant promotions based on number of contracts. The promotion can be of absolute value or relative value. Example:	
<ul style="list-style-type: none"> <li>a. the first 5 contracts of a subscriber get a discount of 5% each. All following contracts get a discount of 10 %.</li> <li>b. the first 5 contracts of a subscriber get a discount of 10.00 SYP. All following contracts get a discount of 20.00 SYP.</li> </ul>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

 Note:

<b>ID#: BSCS-CMG-025</b>	<b>Raised by: -</b>
<b>UR: Service Sale</b>	
<b>Current Flow:</b>	
<p><b>Detailed Requirement:</b></p> <p>System shall offer the capability to sell services with an up-front payment considering all the applied taxes. The up-front payment shall be realised and booked with a specific GL account.</p> <p>The following service sale shall be supported</p> <ol style="list-style-type: none"> <li>Telephony Installation</li> <li>LL Installation</li> <li>xDSL Installation</li> <li>FTTB Installation</li> <li>Telephony Line Moving</li> <li>Telephony Contract Takeover</li> <li>xDSL Line Moving</li> <li>xDSL Contract Takeover</li> <li>Line Termination</li> <li>Change Phone Number</li> <li>ADSL Bundle</li> <li>xDSL Installation from ISP</li> <li>Call Details Statement</li> </ol>	
 Note:	

<b>ID#: BSCS-CMG-026</b>	<b>Raised by: -</b>
<b>UR: Device Sale</b>	
<b>Current Flow:</b>	
<p><b>Detailed Requirement:</b></p> <p>System shall offer the capability create catalog for devices and shall make it available to the cashier to choose from, to sell to the customer. System shall support the device list only with no support for information on the available quantities in the stock or the possibility to choose multiple device in one shot.</p>	


Prepared (Subject resp)		No.		
Marwan Khoury		1029-FCP 132 1747		
Approved (Document resp)	Checked	Date	Rev	Reference
Ziad Hobeika		2018-07-10	D	


System shall generate a receipt with the financial tax to the customer and shall book a journal. The journal can be used for financial reconciliation.


Places where there are no cash counter CSR will have an option to ensure the charges get reflected over the invoice. Tax applied for the sale will either be upfront or will be collected over invoice based on the availability of the cashier.

Examples of device sell:

- a. Router
- b. Spaces

 *Note:* Stock inventory shall not be available in CCBS nor the possibility to rent items. Returning/replacing a sold item shall not be handled in CCBS.

<b>ID#: BSCS-CMG-027</b>	<b>Raised By: -</b>
<b>UR: Service Visibility Control</b>	
<b>Current Flow:</b>	
<b>Detailed Requirement:</b>	
Target solution shall offer one configurable mechanism specifying service visibility, the visibility option can be used external system to decide if the service should be displayed or not (E.g.: Selfcare).	
 <i>Note:</i>	

<b>ID#: BSCS-CMG-028</b>	<b>Raised by: -</b>
<b>UR: On-demand Call Details Statement Charge</b>	
<b>Current Flow:</b>	
<b>Detailed Requirement:</b>	
The target system shall charge on-demand call detail statement. The charge shall be configurable and shall be based on a range of number of pages to be printed. The solution shall offer web service to read the charges with an input of number of pages to print.	
 <i>Note:</i>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

### 2.1.3 Rating and Balance Management

In Rating Management, the parties to be charged for usage and other events are identified and their corresponding charges are calculated. This section presents the current business procedure/flow related to rating management and the requirements to be taken care in target system.

Each requirement unit is specified in an individual block


<b>ID#: BSCS-RBM-001</b>	<b>Raised by: -</b>
<b>UR: Charging Procedure</b>	
<b>Current Flow:</b>  Post-paid CDRs are collected from switches in batches every 10-days into CDRAC mediation application. CDRAC application process CDRs only after complete collection, of past 2 months. The processed CDRs are available to BSCS billing system for offline charging. The CDRs are charged and stored in database within BSCS. The BSCS rating process runs only once in the Bill cycle (every two-months) and remain idle for the rest of the time.	
<b>Detailed Requirement:</b>  The billing system should rate the CDRs and store them in database as Usage to bill them when needed.	
<i>Note:</i>	


<b>ID#: BSCS-RBM-002</b>	<b>Raised by: -</b>
<b>UR: Late CDR Handling</b>	
<b>Current Flow:</b>  Late CDR acceptance period is configured in BSCS. Offline charging engine with in BSCS rejects incoming ASCII CDRs if the call belongs to period older than the configured period.	
<b>Detailed Requirement:</b>  The target system should support configurable late CDR acceptance period, which is 90 days. The target billing system should reject CDRs if the call period is older than the configured late acceptance period. The rejected CDRs are subjected for manual investigation for further action on those.	
<i>Note:</i>	



Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

--

<b>ID#: BSCS-RBM-003</b>	<b>Raised by: -</b>
<b>UR: CDR Rejection</b>	
<b>Current Flow:</b>  BSCS performs offline charging for service usage and event CDRs. Each process in the rating chain rejects CDRs due to various reasons and reprocess them post correction.	
<b>Detailed Requirement:</b>  The target system should treat the CDRs as per their eligibility. The billing system should process and reject the CDRs in the following situations: <ul style="list-style-type: none"><li>a. Unknown subscriber</li><li>b. Ineffective subscriber</li><li>c. Inactive service during the call time</li><li>d. Late CDRs older than the configured acceptance period</li><li>e. Call date is missing in tariff node</li></ul> The rejected CDRs should be located into pre-defined directory which is subjected to manual investigation.	
 <i>Note:</i>	

<b>ID#: BSCS-RBM-004</b>	<b>Raised By: -</b>
<b>UR: Reprocess Rejected CDR</b>	
<b>Current Flow:</b>  BSCS reprocess rejected CDRs, post correction of the cause.	
<b>Detailed Requirement:</b>  Target system should place rejected CDRs to a pre-defined directory. The rejected CDRs will be subjected to manual investigation for the cause and fix for the cause will be manual. The system should allow to reprocess the rejected CDRs post the corrective action is carried out over the CSR by IT team.	
 <i>Note:</i>	

<b>ID#: BSCS-RBM-005</b>	<b>Raised by: -</b>
<b>UR: Unit of Measurement in CDR</b>	


Prepared (Subject resp)		No.		
Marwan Khoury		1029-FCP 132 1747		
Approved (Document resp)	Checked	Date	Rev	Reference
Ziad Hobeika		2018-07-10	D	


**Current Flow:**


Telephone Usages are processes as CDRs, that has duration as unit of measurement. Other than the usage charges, event charges are used. The event charges are resulted from events like line movement and are initiated from CRM and posted as OCC in BSCS FEES table.

**Detailed Requirement:**


Target system should process telephone usage CDRs with duration as UoM. Data usage should also be processed as usage CDRs with volume as UoM. Chargeable events shall be posted as OCC charge, triggered from an external system.


 Note:

<b>ID#: BSCS-RBM-006</b>	<b>Raised by: -</b>
<b>UR: Voice Usage Customer Identifier</b>	
<b>Current Flow:</b>  Voice usage CDRs are generated by fixed line and IMS line of businesses. The CDRs do contain phone number of the subscriber. The phone number is used in BSCS charging engine to identify the customer to be charged.	
<b>Detailed Requirement:</b>  The billing system should identify the customer voice service usage based on the phone number available in the CDR.	
 Note:	


<b>ID#: BSCS-RBM-007</b>	<b>Raised by: -</b>
<b>UR: Data Usage Customer Identifier</b>	
<b>Current Flow:</b>  N/A	
<b>Detailed Requirement:</b>  The billing system should identify the customer data service usage based on the account number available in the CDR.	
 Note:	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

<b>ID#: BSCS-RBM-008</b>	<b>Raised by: -</b>
<b>UR: Voice Usage Pricing</b>	
<b>Current Flow:</b>  Voice service usage is charged based on zone and time in BSCS.	
<b>Detailed Requirement:</b>  The target system should meet the following requirements: <ol style="list-style-type: none"> <li>Voice services should be categorised as Local, National, International, Mobile and Short-code and IN Services based on zones.</li> <li>Time of the call should be categorised as Peak and Off-Peak.</li> <li>All National, International and Mobile category calls should be charged with time consideration (peak/off-peak)</li> <li>All Short code calls should be charged irrespective of time of the call.</li> <li>National access codes should be used to set the national zone. The codes are 011, 021, 043, 041, 023, 033, 031, 016, 015, 052,051,014, 022.</li> </ol>	
 <i>Note:</i>	

<b>ID#: BSCS-RBM-010</b>	<b>Raised by: -</b>
<b>UR: Rate-plans with Charges</b>	
<b>Current Flow:</b>  There are two types of rate-plans used. OCC rate-plans are used at customer level, that holds charges for events. Contracted Rate-plans are used at contract level, that holds charges for service usage.	
<b>Detailed Requirement:</b>  The target system should meet the following requirements: <ol style="list-style-type: none"> <li>define OCC rate-plan which will be attached at customer level only.</li> <li>define contractual rate-plan which will be attached at contract level only</li> <li>OCC rate-plan should have event services/OCC services to apply OCC</li> <li>Contractual rate-plan should have all network service/VAS with charges defined for usage, access and subscription.</li> </ol>	
 <i>Note:</i>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference


<b>ID#: BSCS-RBM-011</b>	<b>Raised by: -</b>
<b>UR: GSHDSL and Leased Line Charging</b>	
<b>Current Flow:</b>  GSHDSL and Leased Line are defined as Telephony contracts and assigned a virtual number	
<b>Detailed Requirement:</b>  The target system should support subscription and access fees for the GSHDSL and Leased Line without the need to define a virtual phone number	
 <i>Note:</i>	

<b>ID#: BSCS-RBM-012</b>	<b>Raised by: -</b>
<b>UR: Free Phone Service</b>	
<b>Current Flow:</b>  Free phone service feature (toll free) allows subscribers' calls to numbers of form 0800XXXX to be free of charge. The owner of the toll-free number is charged for all the incoming calls to this designated number. The IN platform is performing the charging for incoming calls on b-number. CDRAC does not have the capability to read the IN raw CDRs generated for this service. Consequently, the information is extracted from IN SYSBASE database in form of text files and provided to CCBS via ftp procedure. The files provided are grouped per province. All files from all provinces are then consolidated into one single file using Norton commander tool. This single file is processed by script load_free_phone.ksh in CCBS to extract the charge information for the service and load as OCC charge in FEES table in BSCS database. The OCC charge is available on the invoice in billing cycle.	
<b>Detailed Requirement:</b>  The target solution shall offer the below, in BSCS, in-line with FPH service processing: <ol style="list-style-type: none"> <li>1. Shall define one dedicated service, for assignment to Service Subscriber's contract.</li> <li>2. Shall accept pre-rated service usage record from external component (IN System). The CDR must have call destination number in-line with Service Subscriber's phone number and IN Service ID along with other relevant call details.</li> <li>3. Shall expect one pre-rated usage records, for Service subscriber.</li> </ol>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

4. Shall process pre-rated usage record to charge the usage towards Service Subscriber.
5. Shall store the call records in UDR database.

 *Note:*

<b>ID#: BSCS-RBM-013</b>	<b>Raised by: -</b>
<b>UR: Universal Access Number service</b>	
<p><b>Current Flow:</b></p> <p>Universal access number service feature allows a subscriber to combine all phone numbers (from fixed line, mobile, voice mail) into one number of the form 0801XXX. For all calls to UAN, both a-number and b-number are charged. IN platform is charging the calls to UAN and generate the CDRs. All CDR information for UAN service calls are stored in IN SYSBASE database. Due to the inability of CDRAC to process the IN raw CDRs, charge information for UAN services are extracted from IN database and put into text files. These text files (one for A-number and one for B-number) are transferred to CCBS solution via FTP procedure. CCBS consolidate all such files into single files for A-number and B-number separately. All charge information from these files are loaded to FEES table as OCC in BSCS database.</p>	
<p><b>Detailed Requirement:</b></p> <p>The target solution shall offer the bellows, in BSCS, in-line with UAN service processing:</p> <ol style="list-style-type: none"> <li>1. Shall define one dedicated service, for assignment to Service Subscriber's contract.</li> <li>2. Shall accept pre-rated service usage record from external component (IN System). The CDR must have call destination number in-line with Service Subscriber's phone number and IN Service ID along with other relevant call details.</li> <li>3. Shall expect two pre-rated usage records, one for Service User and One for Service Subscriber.</li> <li>4. Shall process both pre-rated usage record to charge Service User and Service Subscriber respectively.</li> <li>5. Shall store the call records in UDR database.</li> </ol>	
<p> <i>Note:</i></p>	

<b>ID#: BSCS-RBM-014</b>	<b>Raised by: -</b>
<b>UR: Virtual Private Network service</b>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

### Current Flow:

VPN service is available for corporates e.g. Company, Establishment, Bank ... VPN service connects all branches of the corporate via a special network. Each branch in the corporate has given a special number of format 0808xxxxaaa, where xxx maps to the corporate and 'aaa' maps the specific branch of the corporate. These numbers will be used for communication with-in the branches of the corporate. Charge for such calls are paid by A-number only. IN platform in in-charge of performing the rating and CDR generation. All VPN CDR information is also stored in IN database. Due to CDRAC incapability of processing IN CDRs, IN team extracts VPN service charge information in text files and provide to CCBS solution for billing. These text files are processed in CCBS solution and charge information is loaded in BSCS database.

### Detailed Requirement:


The target solution shall offer the bellows, in BSCS, in-line with VPN service processing:

1. Shall define one dedicated service, for assignment to Service Subscriber's contract.
2. Shall accept pre-rated service usage record from external component (IN System). The CDR must have call origin number in-line with Service Subscriber's phone number and IN Service ID along with other relevant call details.
3. Shall expect one pre-rated usage records, for Service User (which is Service Subscriber himself).
4. Shall process pre-rated usage record to charge the usage towards Service User, which is Service Subscriber himself.
5. Shall store the call records in UDR database.

 Note:

<b>ID#: BSCS-RBM-015</b>	<b>Raised by: -</b>
<b>UR: Personal Number Service</b>	
<b>Current Flow:</b>  Personal number service allows a subscriber to combine all existing numbers (landline, mobile, Voice mail) into one special number of the form 0807xxxx. For all calls to personal number, subscriber is responsible to pay (b-number is charged). IN platform in in-charge of performing the rating and CDR generation. All PNS CDR information is stored in IN database. Due to CDRAC incapability of processing IN CDRs, IN team extracts PNS charge information in text files and provide to CCBS solution for billing. These text files are processed in CCBS solution and charge information is loaded in BSCS database. There is only one subscriber in current ST business.	


Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

<p><b>Detailed Requirement:</b></p> <p>The target solution shall offer the bellows, in BSCS, in-line with PNS service processing:</p> <ol style="list-style-type: none"> <li>1. Shall define one dedicated service, for assignment to Service Subscriber's contract.</li> <li>2. Shall accept pre-rated service usage record from external component (IN System). The CDR must have call destination number in-line with Service Subscriber's phone number and IN Service ID along with other relevant call details.</li> <li>3. Shall expect one pre-rated usage records, for Service Subscriber.</li> <li>4. Shall process pre-rated usage record to charge the usage towards Service Subscriber.</li> <li>5. Shall store the call records in UDR database.</li> </ol> <p> <i>Note:</i></p>	
--	--

<b>ID#: BSCS-RBM-016</b>	<b>Raised by: -</b>
<b>UR: Premium Rate Service</b>	
<p><b>Current Flow:</b></p> <p>Premium rate service allows a subscriber to present certain services like social, economic, entertainment at a premium/special price over a special number of format 193xxxx. The caller pays the price of the call (A-number charging). In current solution, this service is only offered via pre-paid cards.</p>	
<p><b>Detailed Requirement:</b></p> <p>The target solution shall offer the bellows, in BSCS, in-line with PRS service processing:</p> <ol style="list-style-type: none"> <li>1. Shall define one dedicated service, for assignment to Service Subscriber's contract.</li> <li>2. Shall accept pre-rated service usage record from external component (IN System). The CDR must have call destination number in-line with Service Subscriber's phone number and IN Service ID along with other relevant call details.</li> <li>3. Shall expect one pre-rated usage records, for Service User. Service User is the Service Subscriber here.</li> <li>4. Shall process pre-rated usage record to charge the usage towards Service Subscriber.</li> <li>5. Shall store the call records in UDR database.</li> </ol>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

 Note:

<b>ID#: BSCS-RBM-017</b>	<b>Raised by: -</b>
<b>UR: Telephone Voting Service</b>	
<p><b>Current Flow:</b></p> <p>A subscriber gets a special number of format 192xxxx when subscribes VOT service. VOT service offers the subscriber to present a question to mass and get the voting by dialling the number or choosing a multiple option answer. The caller pays the price of the call (A-number charging). This service is offered via pre-paid cards only at present and CCBS solution is not involved. There is future for offering VOT service for post-paid subscribers. Then CCBS will receive CDRs for offline charging.</p>	
<p><b>Detailed Requirement:</b></p> <p>The target solution shall offer the below, in BSCS, in-line with VOT service processing:</p> <ol style="list-style-type: none"> <li>1. Shall define one dedicated service, for assignment to Service Subscriber's contract.</li> <li>2. Shall accept pre-rated service usage record from external component (IN System). The CDR must have call destination number in-line with Service Subscriber's phone number and IN Service ID along with other relevant call details.</li> <li>3. Shall expect one pre-rated usage records, for Service User. Service User is the Service Subscriber here.</li> <li>4. Shall process pre-rated usage record to charge the usage towards Service Subscriber.</li> <li>5. Shall store the call records in UDR database.</li> </ol>	
<p> Note:</p>	

<b>ID#: BSCS-RBM-018</b>	<b>Raised by: -</b>
<b>UR: Voicemail Service</b>	
<p><b>Current Flow:</b></p> <p>A subscriber gets a special number of format 0805xxxx when he subscribes to voicemail service. Voicemail service offers a voicemail box to the subscriber. A caller to the subscriber can leave a voice message or send a fax message when subscriber is not available to take the call. The caller pays the price for the call (A-number charging). IN platform generates the CDR for VMS service and stores</p>	



Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

the CDR information in IN database. IN team extract the Cdr information in a text files and sent to CCBS solution for all provinces. In CCBS solution, all CDR text files are merged into single file and sent to CDRAC for processing.

#### Detailed Requirement:

The target solution shall offer the below, in BSCS, in-line with VMS service processing:


1. Shall define one dedicated service, for assignment to Service Subscriber's contract.
2. Shall accept pre-rated service usage record from external component (IN System). The CDR must have call destination number in-line with Service Subscriber's phone number and IN Service ID along with other relevant call details.
3. Shall expect one pre-rated usage records, for Service User. Service User is the Service Subscriber here.
4. Shall process pre-rated usage record to charge the usage towards Service Subscriber.
5. Shall store the call records in UDR database.


 Note:

<b>ID#: BSCS-RBM-019</b>	<b>Raised By: -</b>
<b>UR: Real IP Service</b>	
<b>Current Flow:</b>  A subscriber can request real IP from any ISP (ST Tarassul or any private ISP) by providing his phone number. This service has monthly charge. ISPs send an excel file with phone number and fee to ST every month. All information from all ISPs are consolidated into a single text file 'Internet.txt' and uploaded to CCBS rating system. The file is processed via a custom solution, which extracts the information and make new entries into FEES table in BSCS database. This fee is applied in invoice and displayed in a dedicated section.	
<b>Detailed Requirement:</b>  The target system should meet the following requirements: <ol style="list-style-type: none"> <li>a. Dedicated service should be available for subscription in billing system, for real IP request by subscriber.</li> <li>b. For each Real IP request, a service event should be created with a charge associated.</li> <li>c. The service event charge should be registered in billing system</li> <li>d. The charge should reflect on the invoice under a separate dedicated section.</li> </ol>	


Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

 Note:

<b>ID#: BSCS-RBM-020</b>	<b>Raised By: -</b>
<b>UR: Telegram Service</b>	
<b>Current Flow:</b>  <p>Telegram service is offered to special customers like Military, Ships and special government offices. This service has a monthly recurring charge. The office of telegram sends excel file with Phone number and associated fee to ST every month. All information is consolidated into a single text file 'telegram.txt' and uploaded to CCBS rating system. A custom solution is developed to process the file and make new entries in FEES table in BSCS database. This fee is applied in invoice during billing and appear in invoice in a separate section.</p>	
<b>Detailed Requirement:</b>  <p>The target system should meet the following requirements:</p> <ol style="list-style-type: none"> <li>Dedicated service should be available for subscription in billing system, for telegram service.</li> <li>For each telegram service usage, a service event should be created with a charge associated.</li> <li>The service event charge should be registered in billing system</li> <li>The charge should reflect on the invoice under a separate dedicated section.</li> </ol>	
 Note:	

<b>ID#: BSCS-RBM-021</b>	<b>Raised by: -</b>
<b>UR: Friends and Family Charging</b>	
<b>Current Flow: -</b>  <p>Friends and Family function is not available due to technical limitations of CRM application.</p>	
<b>Detailed Requirement: -</b>  <p>The target architecture should provide Friends and Family functions where Special tariff for calls to Friends and Family numbers shall be allowed.</p>	
 Note:	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

<b>ID#: BSCS-RBM-022</b>	<b>Raised by: -</b>
<b>UR: IN Service Access Charge</b>	
<b>Current Flow: -</b>  Excel file with monthly charges from all province are collected and merged. The charges are loaded into FEES table in BSCS using shell scripts	
<b>Detailed Requirement: -</b>  The target solution shall offer the below, in BSCS, in-line with IN service processing: 1. Shall define service(s) for IN service's access charge, for assignment to Service Subscriber's contract. 2. Shall accept pre-contained access charge record from external component (IN System/ISP/Telegram office). 3. Shall expect one pre-contained access charge record, for Service subscriber. 4. Shall process pre-contained access charge record to charge the access charge towards Service Subscriber. 5. Shall store the access charge records in BSCS database for further billing.	
 <i>Note:</i>	

#### 2.1.4 Core Billing and Invoice

The section requirement ensures that the bill invoice reflect all the commercially agreed billable events and any bill invoice adjustments agreed between the Service Provider and the customer.

Bill Invoice Management processes ensure creation of the bill invoice, physically and/or electronically and its distribution to customers while making sure that the appropriate taxes, discounts, adjustments and credits for the products and services delivered to customers have been applied.

These processes are accountable for assuring that enterprise revenue is billed and invoices delivered appropriately to customers. They are responsible for:

- Establishment and application of taxes and charges to the services delivered to customers;
- Application of the adjustment;
- Creation of accurate bill invoices including all adjustments, rebates, discounts, credits;
- Production of bill in physical and/or electronic form to customers in accordance with the billing cycle;

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

<b>ID#: BSCS-CBI-001</b>	<b>Raised by: -</b>
<b>UR: Billing Process</b>	
<p><b>Current Flow:</b></p> <p>The whole billing process for each bill cycle BC takes 4 weeks for all Billing activities. It is divided into 4 BCs (sub-BCs/groups), each group contains subscribers belonging to some province. Originally, subscriber distribution was about 1 M subscriber per group but due to conflict in Syria and people migration cases, the distribution has varied, for example G1 (Damascus and Rural) became about 1.5 M subscribers. So, each week one sub-BC/group will be handled.</p> <p>Before Running the BCH, ST billing team runs 3 mandatory scripts.</p> <ul style="list-style-type: none"> <li>Update current balance: Updates the current balance for each customer, if needed, to guarantee that customer's current balance is 100% correct before running BCH. In Some special cases the current balance ("cscurbalance" field in CUSTOMER_ALL table) may differ from the sum of the open amounts ("sum (ohopnamt_gl)" in ORDERHDR_ALL table) due to an operation done externally for e.g. (cancelling an invoice via DB module (AR)), so the script "update current balance" will make sure that value in "cscurbalance" field in CUSTOMER_ALL table is identical to the "sum (ohopnamt_gl)" in ORDERHDR_ALL table. There are other cases that may cause balance inconsistency, however, they were not identified.</li> <li>Annual Red Crescent Stamp: Installs the OCC of Red Crescent Stamp for each customer once a year, usually on first BC of the year.</li> <li>Annual Red Crescent Stamp in case of contract "takeover": Installs the OCC of Red Crescent Stamp for the new customer who gained his contract after a "takeover" operation no matter how many times this operation happened on this contract before within the current year. For better understanding lets have an example: We have three customers Customer – X with contract A Customer – Y with contract B Customer – Z with contract C  Let's say contract A is taken over by Customer Y and now customer Y has two contracts A and B, <b>then customer Y will be charged with red Crescent stamp upon this takeover.</b> Later, same contract A is taken over by Z, <b>then customer Z will be charged with red Crescent stamp upon this takeover.</b></li> </ul>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

**BCH:** bills customers in regular mode (on demand) or bill cycle mode by calculating customer's usage, services and fees. The output of BCH is 6 XMLs for each customer.

**BGH:** Generates 1 XML from the 6 XMLs had been generated by BCH for each customer, and inserts this XML in BSCSPROD DB in table BGH\_BILLS (non-standard BSCS table) which is created and customized here for BGH to store XMLs that belong to single contract customers only, XMLs that belong to multi contract customers remain on billing server file system.

**GetInvoice.ksh:** moves XMLs created by BGH to another folder based on customer type.

1. INTERNAL for ST employees
2. OFFICIAL for other government departments, ministries ...etc., employees
3. BC: for normal customers.
4. BDP: for customers who should receive their invoices via national post service.

Then in each folder it accumulates number of XMLs in one XML (1000 XMLs maximum) then sort XMLs by CSOs to enable sending invoices to customer based on their CSOs, ST runs it Monday morning after all BGH instances are finished.

**PGenInvoice.ksh:** generates PDF files from XMLs accumulated by GetInvoice, update the table BGH\_BILL\_IMAGE\_REF to put the system path of the PDF

#### **Detailed Requirement:**

The billing process will start from receiving all the CDRS from the different switches and once the usage is rated from all CDRS, system will be ready for the execution of "Balance Update" script if there is a need for it.

Red Crescent Stamp for contract takeover shall be passed from CRM, every time the contract is taken over by a customer. This stamp will be charged to the target customer where the contract is moving into.

Both the charges should be configurable along with its posting with exclusion for either certain Rate plan or Customer category.

Post completion of invoice generation, system shall segregate pdf format invoices into following directory structure:

[Path]/ [Directory Output]/ [Customer CSO]/BDP  
 [Path]/ [Directory Output]/ [Customer CSO]/email  
 [Path]/ [Directory Output]/ [Customer CSO]/CD  
 [Path]/ [Directory Output]/ [Customer CSO]/default

Where

[Directory Output] - depends on customer categories. One or more customer categories can be mapped to one single Directory Output.

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

[Customer CSO] - depends on CSO associated to the customer. With this grouping invoices shall be sorted based on CSO

BDP – Customers with active BDP service shall have their invoices into this sub-directory

Email - Customers with active Email service shall have their invoices into this sub-directory

CD - Customers with active CD service shall have their invoices into this sub-directory


Default – Customers with no active BDP, email and CS service shall have their invoices into this sub-directory.


*Note: Balance update needs be verified during migration which all customer having balance mismatch.*

<b>ID#: BSCS-CBI-002</b>	<b>Raised by: -</b>
<b>UR: Pre-Billing activities</b>	
<p><b>Current Flow:</b></p> <p>Apart from the scripts mention in the requirement “Billing Process” i.e. “Balance update”, “Annual Red Crescent Stamp” and “Red Crescent stamp for Contract changeover” the following scripts are also run as part of pre-bill activity.</p> <p>Revolution promo: This script runs to remove some services access/subscription fees as they are activated in a special date. The script should update the billing data for the activated services in that date (profile_service table), then this service will not be billed in the next BC</p> <p>Free service: to give the subscribers who has credit more than 1000 SYP, a discount 100% on two services cost (services are determined CLIP, Call forward...)</p> <p><b>Detailed Requirement:</b></p> <p>Target system to have a process to apply the “Revolution Promo” and “Free Service” towards the customer before executing the bill cycle.</p> <p>For “Revolution Promo” target shall have an option to provide discount on services (subscription fee) for the first couple of month or bill cycle period based on its activation dates. The special activation dates shall be configurable within the system globally and applied to all. For e.g.: 1-Jan configured as special date, any customer subscribing for a configured service on that date will have promotion applicable.</p> <p>In case of “Free service”, target shall have the capability to check the customer balance prior to bill cycle and if the overall credit balance (Excluding Deposit) is more than 1000 SYS or other configured value, system shall apply discount on the access charges for any two of the following services (CLIP, call waiting, call baring with password) order by their access fee cost, the expensive has more priority...</p>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference


 *Note:*

<b>ID#: BSCS-CBI-003</b>	<b>Raised by: -</b>
<b>UR: Bill Cycle</b>	
<b>Current Flow:</b>  <p>As per current CCBS solution, bill cycle is executed once every two months. Before the BC execution, all CDRs for last two months are processed by CDRAC and BSCS charging at one go. Four (4) bill cycle covers the complete post-paid customer base.</p> <p>There are 5 Bill cycle 5 that holds Customer from an older system. There is no active contract in BC5 and customers in that BC are not invoiced. BC5 is closed and there is no case where a customer is moved to this BC at all.</p> <p>BSCS billing module (BCH) is used for bill cycle execution. BCH considers usage charges, Onetime and monthly charges for last two months.</p>	
<b>Detailed Requirement:</b>  <p>The target system shall have one bill cycles with interval of 1 month. All customers in the system shall belong to this single bill cycle.</p>	
 <i>Note: With the current CCBS system the bill cycle is of 2 months' interval, moving to the target all the customer will be migrated to one-month bill cycle during cutover.</i>	

<b>ID#: BSCS-CBI-005</b>	<b>Raised by: -</b>
<b>UR: Flat Customer Billing Account</b>	
<b>Current Flow:</b>  <p>Single customer-contract relations exist in BSCS. All billing accounts are primary billing accounts defined at customer level.</p>	
<b>Detailed Requirement:</b>  <p>Target solution should allow a single customer to have multiple billing account. Each billing account can be assigned at contract level to generate individual invoice.</p>	
 <i>Note:</i>	

Prepared (Subject resp)		No.		
Marwan Khoury		1029-FCP 132 1747		
Approved (Document resp)	Checked	Date	Rev	Reference
Ziad Hobeika		2018-07-10	D	

--

<b>ID#: BSCS-CBI-006</b>	<b>Raised by: -</b>
<b>UR: Large Account Billing Account</b>	
<b>Current Flow:</b>  Billing account hierarchy does not exist due to technical limitation. Hence LA structure is not used in ST business. Single customer-contract relations exist in BSCS. All billing accounts are primary billing accounts defined at customer level.	
<b>Detailed Requirement:</b>  Target system shall support LA definition. LA structure will be defined in maximum of 8 levels Large account members automatically get assigned a primary billing account during their creation. <ul style="list-style-type: none"> <li>• If large account members are marked as payment responsible, they receive a bill for all charges (one-time, recurring and usage) accumulated for their primary billing account. However, by defining additional billing account assignments on other large account levels, the accumulated charges can be split.</li> <li>• If large account members are not marked as payment responsible, they cannot be owner of an active billing account and the primary billing account created for them is automatically set to inactive. All charges accumulated for these members are automatically assigned to the next higher member with an active primary billing account.</li> <li>• If the payment responsibility is removed from a large account member, its billing account is set to inactive.</li> <li>• If a large account member who is not payment responsible is converted to an individual customer, the new individual customer is automatically payment responsible and a default billing account is assigned.</li> <li>• If a payment responsible individual customer is converted to a large account member who is not payment responsible, the corresponding billing account is deactivated.</li> </ul>	
 <i>Note:</i>	

<b>ID#: BSCS-CBI-007</b>	<b>Raised by: -</b>
<b>UR: Rounding Strategy</b>	
<b>Current Flow:</b>  The invoice amount is rounded two times:	



Prepared (Subject resp)		No.		
Marwan Khoury		1029-FCP 132 1747		
Approved (Document resp)	Checked	Date	Rev	Reference
Ziad Hobeika		2018-07-10	D	

- At item level, i.e. usage, subscription, discount, tax till two decimal place having the interval as 0.01 SYP and Lower bound as 0.005 SYP
- Total invoice is again rounded off the ZERO decimal place to have a whole figure.

For Invoice item level, below is an example to explain the logic:

If the usage amount is 1000.234 >> The rounded off amount will be 1000.230

If the rental amount is 1000.236 >> The rounded off amount will be 1000.24

If the rental amount is 1000.235 >> The rounded off amount will be 1000.24

For Invoice total rounding off, below is an example to explain the logic:

If the invoice amount is 1000.15 >> The rounded off amount will be 1001

If the invoice amount is 1000.4 >> The rounded off amount will be 1000

#### **Detailed Requirement:**

The target system shall provide a configurable mechanism to set Rounding rules. Target solution shall round the total invoice amount (including taxes).

Example as below: At total invoice amount level. The rounding rule shall round the total invoice amount to a complete whole figure (without decimal places). To illustrate the rule, an example is as follows:

- If the invoice amount is 1000.4 >> The rounded off amount will be 1000
- If the invoice amount is 1000.49 >> The rounded off amount will be 1000
- If the invoice amount is 1000.5 >> the rounded off amount will be 1001
- If the invoice amount is 1000.55 >> the rounded off amount will be 1001

The difference amount resulting due to rounding shall be stored against a separate GL

 *Note:*


<b>ID#: BSCS-CBI-008</b>	<b>Raised by: -</b>
<b>UR: On-Demand Billing</b>	
<b>Current Flow:</b>  On-demand billing for a customer is supported. On-demand billing is like a normal bill cycle except that on-demand bill runs for a single specific customer.  BCH checks if there are UDRs for this subscriber in UDR table after last bill run [as rating happens once in every two months]. If yes, the customer is billed for the usages and services otherwise the customer is only billed for services.	
<b>Detailed Requirement:</b>  Targets system shall provide the capability to trigger on-demand billing request from an external system.	


Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference


User can come to ST customer care and ask for an invoice till current date. System to consolidate all the charges starting from the last bill cycle end date till current date and provide an invoice towards the customer, against which the payment can be accepted.

All the usage event inserted in BSCS DB and invoice will be based on the inserted date and not on the call date. Any usage inserted within the range of last billed and BOD will be invoiced and usage getting inserted post BOD will be invoiced in the actual bill run at month end.

Due date for any on-demand bill should be for one day, i.e. The very next day of the generation of invoice, post which the invoice is moved to collection process.


 *Note: No prebilling script is executed prior to execution of on-demand billing.*


<b>ID#: BSCS-CBI-009</b>	<b>Raised by: -</b>
<b>UR: Supress Invoice for Customer</b>	
<b>Current Flow:</b>	
As per current CCBS solution, invoices are generated for all post-paid customers. No customer is exempted from the invoice generation process.	
<b>Detailed Requirement:</b>	
Target system shall generate invoices for all post-paid customers. No customer is exempted from the invoice generation process.	
 <i>Note:</i>	

<b>ID#: BSCS-CBI-010</b>	<b>Raised by: -</b>
<b>UR: Payment Terms</b>	
<b>Current Flow:</b>	
In every billing cycle (every two months), post-paid customers are billed and invoiced. In current CCBS solution, a payment grace period of 30 days can all customers for payment of the open invoice amount.	
<b>Detailed Requirement:</b>	
System should provide option for configurable payment terms which would consist of due date periods.	
 <i>Note:</i>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

--

<b>ID#: BSCS-CBI-012</b>	<b>Raised by: -</b>
<b>UR: Threshold Based Invoice Suppression</b>	
<b>Current Flow:</b>  Only zero invoice is suppressed. BCH generates XML documents for all invoices with invoice amount greater than zero.	
<b>Detailed Requirement:</b>  Zero invoice shall be suppressed. BCH generates XML documents for all invoices with invoice amount greater than zero.	
 <i>Note:</i>	

<b>ID#: BSCS-CBI-014</b>	<b>Raised by: -</b>
<b>UR: Invoice Display for Negative Balance</b>	
<b>Current Flow:</b>  All credit in customer's account (generated by Advance payment, Credit note etc.) are balanced against open amounts. Post balancing if customer still holds credit, this results in negative invoice. As per existing CCBS solution, negative invoices are generated.	
<b>Detailed Requirement:</b>  Credit in customer's account (generated by Advance payment, Credit Adjustment etc.) shall be balanced against open amounts. Post balancing, if customer still holds credit, the invoice amount shall be displayed as Zero Amount to be paid and the customer balance shall be displayed as available.	
 <i>Note: For detail of invoice layout please refer Reference 1.</i>	

<b>ID#: BSCS-CBI-016</b>	<b>Raised by: -</b>
<b>UR: Call Itemization Service</b>	
<b>Current Flow:</b>  Non-Official Customer Type receiving bills through POST gets an invoice generated with call details restricted to 4 pages only.  Call itemization is a flag enabled/disabled at billing account level.	


Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference


Based on the flag, BCH generates invoice xml documents with/without call details.  
BGH creates summary XML out of the BCH generated XMLs.  
GetInvoice.ksh script moves the BGH XMLs to dedicated directories based on the customer types like Internal ST, Official, BC, BDP.  
PGenInvoice.ksh process the files to generate the PDF version of the invoice.

#### **Detailed Requirement:**

The target solution shall offer call itemization over the invoice as an explicit service. The feature shall be allowed to the customers only upon customer's explicit request. The call itemization service shall be chargeable. All customers without Call Itemization Service shall not have call details over the invoice.

No customers of any category shall have it implicit.  
Call itemization shall exclude local call records always.

 *Note:*

<b>ID#: BSCS-CBI-018</b>	<b>Raised by: -</b>
<b>UR: Bill Format</b>	
<b>Current Flow:</b>  Reference 1 provides the bill format of ST's customers. All the invoices are generated in PDF format.	
<b>Detailed Requirement:</b>  Reference 1 describe the bill format in detail with xml tagging. All the invoices are generated in PDF format.  Invoice language will be in Arabic. Promotion, Zones and other data over invoice to be displayed in Arabic. Numbers and numeric values shall be in English.	
 <i>Note:</i>	

<b>ID#: BSCS-CBI-019</b>	<b>Raised by: -</b>
<b>UR: Online Bill Inquiry</b>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

**Current Flow:**

Tasdeed system offers a GUI interface towards ST customer, where customer can inquiry his billed amount which refers to open invoice and late fees

**Detailed Requirement:**

The target system shall provide an API interface that can be used by external systems to query for customer's open invoices amount and late fees.

*Note: Ericsson will be available to support ST in using the API on a best effort basis. However, the state of this requirement will not be conditional on Ericsson providing the support*

<b>ID#: BSCS-CBI-020</b>	<b>Raised by: -</b>
<b>UR: IVR Balance Request</b>	
<b>Current Flow:</b>  ST customer can inquiry about their current open invoice amount, without tax, by calling to IVR short codes. IVR serve the request with the information from its own database. The IVR database is refreshed daily with information from Interbx DB, which in turn gets refreshed data from BSCS and Coheris DB	
<b>Detailed Requirement:</b>  The target system shall provide an API/SQL interface that can be used by IVR to query for customer's open invoice amount. The open invoice amount shall include the taxes over invoice.	
<i>Note:</i>	

<b>ID#: BSCS-CBI-021</b>	<b>Raised by: -</b>
<b>UR: Yearly billing of services recurring charge</b>	
<b>Current Flow:</b>  No functionality currently exists.	
<b>Detailed Requirement:</b>  System shall apply recurring charge of a service independently of the billing period. Example: Below is an example for a service with an individual charging interval of 11 months and a waiting period of 0 months: <ul style="list-style-type: none"> <li>•recurring service charge: 30 SYP</li> <li>•individual charging interval (in billing cycles): 11</li> </ul>	


Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference


- waiting period (in billing cycles): 0
- service activation date: 15 January 2018
- The billing cycle valid for the customer is every month.

The following amounts are charged for this service:

- amount charged on 1 Feb 2018: 30 SYP (without prorating)
- amount charged on 1 March 2018: 0 SYP
- amount charged on 1 April 2018: 0 SYP
- amount charged on 1 May 2018: 0 SYP
- amount charged on 1 Jun 2018: 0 SYP
- amount charged on 1 July 2018: 0 SYP
- amount charged on 1 August 2018: 0 SYP
- amount charged on 1 Sept 2018: 0 SYP
- amount charged on 1 Oct 2018: 0 SYP
- amount charged on 1 Nov 2018: 0 SYP
- amount charged on 1 Dec 2018: 0 SYP
- amount charged on 1 Jan 2019: 0 SYP
- amount charged on 1 Feb 2019: 30 SYP

The above charging mechanism will be applied for RED Crescent Stamp.

 Note:

<b>ID#: BSCS-CBI-022</b>	<b>Raised By: -</b>
<b>UR: Invoice Format</b>	
<b>Current Flow:</b>	
<b>Detailed Requirement:</b>	
Target solution shall generate final invoice in pdf format. The pdf version of invoice shall contain all information for the associated contract and there shall be no limit on the number of pages.	
 Note:	

<b>ID#: BSCS-CBI-023</b>	<b>Raised By: -</b>
<b>UR: Invoice Communication Service</b>	
<b>Current Flow:</b>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

**Detailed Requirement:**

Target solution shall offer three explicit services namely Email, CD and BDP for specifying how to communicate the invoices to a customer. These three services shall be contracted to customer's contract upon explicit customer's request.

With Email service, soft copy of invoices shall be sent to customer via email. This process shall be out of CCBS

With CD service, image of invoices shall be written to CD and sent to customer. This process shall be out of CCBS

With BDP service, invoice shall be printed and sent for mail delivery. This process of communication of out of CCBS.

These three services shall apply recurring charges to the contract, associated with. These three services shall be mutually exclusive.

No customer category shall have these services implicitly contracted.

*Note: Official customers shall not have BDP service implicitly and can be added only with explicit request.*

<b>ID#: BSCS-CBI-024</b>	<b>Raised By: -</b>
<b>UR: Invoice PDF file naming convention</b>	
<b>Current Flow:</b>	
<b>Detailed Requirement:</b>	
Target solution shall generate final invoice in pdf format. The PDF file need to be named as below convention for sorting purpose and stored in respective folders.	
INV_Customer-id_Contract_id	
<i>Note:</i>	

<b>ID#: BSCS-CBI-025</b>	<b>Raised by: -</b>
<b>UR: Invoice Address</b>	
<b>Current Flow:</b>	
No functionality currently exists.	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

**Detailed Requirement:**

System shall use the below address for invoice display.

- Every contract shall have a Billing Account and an address associated to the billing account.
- The address of the BA(s) can be different than the address of the customer.
- The address for the billing account shall be displayed on the bill and not the address saved on customer level.

 *Note:*



Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

## 2.1.5 Finance

### 2.1.5.1 Tax Accounting


A tax is a financial charge or other levy imposed on an individual or a legal entity by a state or a functional equivalent of a state. Taxation represents the calculation and application of taxes per the charges that are connected to a service.

This section provides the details on the process for each tax calculation logic and how it will to be designed in the target.

<b>ID#: BSCS-FIN-001</b>	<b>Raised by: -</b>
<b>UR: Financial Stamp</b>	
<p><b>Current Flow:</b></p> <p>The below logic is applied to calculate and charge Financial Tax on customer for Invoice payment (Advance, Full and Partial).</p> <ol style="list-style-type: none"> <li>1. If the invoice payment amount is <math>\leq 100</math> then 0 SYP is charged towards the customer.</li> <li>2. If the invoice payment amount is <math>&gt; 100</math> and <math>\leq 500</math> then 20 SYP is charged towards customer.</li> <li>3. If the invoice payment amount is <math>&gt; 500</math> then 50 SYP is charged towards customer.</li> </ol> <p>Web payment interface is used to calculate the Financial tax and the segregation of invoice and tax amount is done within web payment, where invoice amount payment is posted towards BSCS and Tax amount is retained in web payment for financial posting aspect</p>	
<p><b>Detailed Requirement:</b></p> <p>System should be able to charge the additional amount towards customer considering the current business logic, amount is configured based on the slab range logic below:</p> <ol style="list-style-type: none"> <li>1. If the Payment amount is <math>\leq 100</math> then 0 SYP is charged towards the customer.</li> <li>2. If the Payment amount is <math>&gt; 100</math> and <math>\leq 500</math> then 20 SYP is charged towards customer.</li> <li>3. If the Payment amount is <math>&gt; 500</math> then 50 SYP is charged towards customer.</li> </ol> <p>The above configured amount to be charged in case of any receipts generated from the CSO. This will hold true for any payment transaction made from AX.</p> <p>Once the receipt is generated and financial tax is charged, the financial tax will not be refunded or reversed.</p> <p>The financial tax amount is not considered as part of invoice amount on the customer bill inquiry through IVR or Selfcare.</p> <p>Post charging and collection, system should be able to post the amount against a separate GL and store it within CCBS for reporting.</p>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

 <i>Note:</i>				

<b>ID#: BSCS-FIN-002</b>	<b>Raised by: -</b>
<b>UR: War Effort Invoice Tax</b>	
<b>Current Flow:</b>  War effort is a 50 SYP charge applied to customer in case invoice payment (Advance, Full and Partial) amount is greater than 3000 SYP. Web payment interface is used to calculate the War effort and the segregation of invoice and tax amount is done within web payment. Where payment towards invoice amount is posted towards BSCS and TAX amount is retained in web payment for financial posting aspect.	
<b>Detailed Requirement:</b>  For the invoice amount greater than 3000 SYP, target system should be able to collect the additional amount configured as “War Effort”, the amount should be configurable as a flat amount in SYP.  In case of single customer with multiple contract having separate invoices, invoice shall be subjected to pay WAR EFFORT in case their individual invoice amount is more than 3000 SYP.  Post charging and collection, system should be able to post the amount against a separate GL and store it within CCBS for reporting.	
 <i>Note: For details of tax calculation in the target system please refer to Reference 19</i>	

<b>ID#: BSCS-FIN-003</b>	<b>Raised by: -</b>
<b>UR: Syria Rebuild Invoice Tax</b>	
<b>Current Flow:</b>  The below formula is applied to calculate and charge Syria Rebuild Tax on customer for Invoice payment (Advance, Full and Partial)  $(VAT + Financial\ Tax + War\ Effort) * 5\%$ where  <ol style="list-style-type: none"> <li>1. VAT is extracted from BSCS using the OTNAME.</li> <li>2. Financial tax is calculated by web payment (as described in ‘Financial Tax’ requirement)</li> <li>3. War effort is also calculated by Web payment (as described in ‘War Effort’ requirement)</li> </ol>	


Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference


Web payment interface is used to extract the VAT from BSCS. Financial Tax and War effort is calculated within web payment. A 5% on the accumulated sum is charged towards customer during payment.

#### Detailed Requirement:

Target system should have a functionality to configure and charge TAX based on other TAX charges. For Syria Rebuild tax, system should have an option to configure (TVA + Financial Tax(as a configured value) +War Effort)\*10%) calculate and charge the customer.


Post charging and collection, system should be able to post the amount against a separate GL and store it within CCBS for reporting.


 Note: For details of tax calculation in the target system please refer to Reference 19

<b>ID#: BSCS-FIN-004</b>	<b>Raised by: -</b>
<b>UR: Mohafaza Stamp Invoice Tax</b>	
<b>Current Flow:</b>  The below formula is applied to calculate and charge Mohafaza Stamp Tax on customer for Invoice payment (Advance, Full and Partial)  $\text{MohafazaStamp1}(0.005) * (\text{invoice amount} - \text{VAT}) + (\text{MohafazaStamp2}(0.05) * \text{VAT}).$ where  Web payment has a configuration structure where the value of MohafazaStamp1 and MohafazaStamp2 can be configured and the value of VAT is extracted from BSCS based on OTNAME	
<b>Detailed Requirement:</b>  Target system to use the below formula to calculate the Mohafaza stamp over invoice amount.  $\text{MohafazaStamp} = (0.005) * (\text{invoice amount})$ shall be used to calculate the charges towards customer as Mohafaza stamp.  Post charging and collection, system should be able to post the amount against a separate GL and store it within CCBS for reporting.	
 Note: For details of tax calculation in the target system please refer to Reference 19	

<b>ID#: BSCS-FIN-005</b>	<b>Raised by: -</b>
--------------------------	---------------------

Prepared (Subject resp)		No.		
Marwan Khoury		1029-FCP 132 1747		
Approved (Document resp)	Checked	Date	Rev	Reference
Ziad Hobeika		2018-07-10	D	

<b>UR: Martyr Stamp Invoice Tax</b>	
<b>Current Flow:</b>  Martyr stamp is a 25 SYP charge applied to customer on invoice payment (Full and Partial)  Web payment application provides an interface to retrieve the invoice amount and apply the flat 25 SYP upon full and partial payment.	
<b>Detailed Requirement:</b>  A configured amount of flat 25 SYP to be collected form the customer against the invoice.  Post charging and collection, system should be able to post the amount against a separate GL and store it within CCBS for reporting	
<i> Note: For details of tax calculation in the target system please refer to Reference 19</i>	

<b>ID#: BSCS-FIN-007</b>	<b>Raised by: -</b>
<b>UR: VAT over Usage</b>	
<b>Current Flow:</b>  A 2% VAT amount is applied over usage.	
<b>Detailed Requirement:</b>  The target system shall have a configurable VAT amount (that will be set at 2%) to be applied over usage charges. The solution shall calculate VAT over the usage charges prior to the application of discounts on usage charges.  VAT applied to customers of category ST-Employees shall be posted to one separate GL account. VAT applied to rest of the customers shall be posted to another GL account.	
<i> Note: For details of tax calculation in the target system please refer to Reference 19. ST need to provide a new GL for the posting of ST-Employees VAT in case it is not already defined</i>	

<b>ID#: BSCS-FIN-016</b>	<b>Raised by: -</b>
<b>UR: Tax Exemptions</b>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

**Current Flow:**
**Detailed Requirement:**

System shall setup customer category as combination of parent category and sub-category.  
The tax exemption rule shall be as of follows:

(Format – Parent\_category\_Price group # Tax Exemption)

Residential\_Internal (ST Employee) # All tax exempted except Red crescent stamp, Tuberculosis stamp and TVA

Residential\_Internal (ST Manager) # All tax exempted except Red crescent stamp, Tuberculosis stamp and TVA

Admin-Official-Official # All tax exempted except TVA

Admin-Official-Official\_Special # All tax exempted except TVA

Admin-Official-Official\_Special\_Deal with special deal #All tax exempted except TVA

Admin-Official-Telecom\_offices\_ST\_Offices # All tax exempted except TVA

Admin-Official-Pay-invoices # All tax exempted except TVA


Eco-Official-Official # All tax exempted except TVA, Sill stamp and Red Crescent stamp


Eco-Official-Official\_Special # All tax exempted except TVA, Sill stamp and Red Crescent stamp

Eco-Official-Official\_Special\_Deal with special deal #All tax exempted except TVA, Sill stamp and Red Crescent stamp

Eco-Official-Telecom\_offices\_ST\_Offices # All tax exempted except TVA, Sill stamp and Red Crescent stamp

Eco-Official-Pay-invoices # All tax exempted except TVA, Sill stamp and Red Crescent stamp

 Note: For details on the customer category based taxation please refer reference 19

<b>ID#: BSCS-FIN-017</b>	<b>Raised by: -</b>
<b>UR: Tuberculosis Stamp Invoice Tax</b>	
<b>Current Flow:</b>	
Tuberculosis Stamp is current configured as Zero.	
<b>Detailed Requirement:</b>	
A configured amount of flat .5 SYP to be collected form the customer against each invoice.	
Post charging and collection, system should be able to post the amount against a separate GL and store it within CCBS for reporting	
 Note: For details of tax calculation in the target system please refer to Reference 19	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

<b>ID#: BSCS-FIN-020</b>	<b>Raised by: -</b>
<b>UR: Taxation on Service Sale</b>	
<b>Current Flow:</b>	
<b>Detailed Requirement:</b>	
Target solution shall include Taxation on Service Sale as defined in Reference 19. The Taxation on Service Sale shall be either Fixed value or percentage.	
<i>Note: For details of tax calculation in the target system please refer to Reference 19</i>	

#### 2.1.5.2 General Ledger Accounting

This part of the requirement gives an overview of the current and the to be process requirement which will be impacting any financial transaction within CCBS.

Section give us a detail on the interface to external financial system from CCBS those needs to be in sync through GL posting.

<b>ID#: BSCS-FIN-011</b>	<b>Raised by: -</b>
<b>UR: GL configuration</b>	
<b>Current Flow:</b>	
Each services and usage types are defined in BSCS with a GL_CODE which is a number with 12 digits, the first 6 digits represent (the service type or the usage type) and provided by the financial team while the other 6 digits represent the customer category. BCH bills each service by its GL-code.	
<b>Detailed Requirement:</b>	
GL Code should be a configurable pattern of 12 digits (Numeric) value where the first 6 digits represent (the service type or the usage type) and provided by the financial team while the other 6 digits represent the customer category.	
<i>Note:</i>	

<b>ID#: BSCS-FIN-012</b>	<b>Raised by: -</b>
<b>UR: Administrative Subscriber Dispute</b>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

**Current Flow:**

A customer can open an administrative complaint (Dispute over Invoice) in CSO. After initial checks are done, the invoice is flagged on BSCS as having an administrative complaint. The bill dispute is solved once the Finance team confirms that there is no problem through backend checks on the billing system. If they decided that there is no problem, additional 'disturbance fees' are added to the customer and the ticket is closed without informing the customer. If they found out an issue, the ticket is routed to Accounting team where AR module is used to add credit notes to the customer if the invoice is already paid or cancel the invoice if the payment was not yet made. The ticket is then routed back to the Finance team who closes it without informing the customer

**Detailed Requirement:**

The target system should have option to register dispute raised by the customer, named as Administrative.

Any Administrative dispute raised by CRM over any invoice, will be flagged in BSCS

Administrative dispute raised will be verified by the Accounting team outside CCBS and post verification the settlement amount or adjustment or write off should be carried out from the payment system.


Once the settlement is triggered from CCBS, the collection will be applicable based on the open amount and the administrative dispute flag on the invoice will be cleared in billing system.


*Note: This part of the requirement describes the financial implication of the dispute, for dispute registration and its impact on dunning please refer respective section.*

<b>ID#: BSCS-FIN-014</b>	<b>Raised by: -</b>
<b>UR: GL Report to Oracle Financial</b>	
<b>Current Flow:</b>	
GL report is generated in billing system post each successful bill cycle execution. The GL report contains due amount against each GL code. The GL report is sent to Oracle financial via e-mail service. The report is then imported in oracle financial.	
<b>Detailed Requirement:</b>	
Target system shall provide an API allowing external systems (BSS) to request information on all GLs shall be available.	
The returned response will be in form of a web service with the GL amount grouped by CSO, province and customer category.	
<i>Note:</i>	

<b>ID#: BSCS-FIN-018</b>	<b>Raised by: -</b>
--------------------------	---------------------

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

<b>UR: Service Addition – Multiple at One Go</b>	
<b>Current Flow:</b>	
<b>Detailed Requirement:</b>  The target solution shall offer to sell multiple services at one shot. The tax(es) applied shall be order wise. Consider the below example for details.  Ex: Given that: <ul style="list-style-type: none"><li>Financial Tax is 25 SYP</li><li>War Effort is 50 SYP</li></ul> <ol style="list-style-type: none"><li>Customer request to add ‘call barring national’ service and ‘BDP’ service</li><li>CSR chooses the “call barring national’ and ‘BDP’ service and goes to the next step</li><li>Autogenerated Service Request is displayed for CSR</li><li>CSR prints the request and wait for customer signature</li><li>One CSR have the signed request, he will activate the services</li><li>Only 2 OCCs (and not 4) will be added<ol style="list-style-type: none"><li>Financial Tax of 25 SYP</li><li>War Effort of 50 SYP</li></ol></li></ol>	
 <i>Note:</i>	


<b>ID#: BSCS-FIN-019</b>	<b>Raised by: -</b>
<b>UR: Promotion post TAX calculation</b>	
<b>Current Flow:</b>	
<b>Detailed Requirement:</b>  Target system shall have the option to calculate promotion after or before taxation. While creation of promotion user is now able to set the promotion package as taxable or non-taxable.  For the non-taxable promotion package, system will first calculate all the tax amount and then apply the tax logic.	
 <i>Note:</i>	

2.1.5.3 Treasury

<b>ID#: BSCS-FIN-015</b>	<b>Raised By:</b>
--------------------------	-------------------



Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

<b>UR: Payment Currency</b>	
<b>Current Flow:</b>  Currency accepted for different modes of payment is only SYP (Syrian Pound).	
<b>Detailed Requirement:</b>  Only payments in SYP currency shall be supported in the target system.	
 <i>Note: Global currency will be configured within CCBS will be SYP.</i>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

### 2.1.6 Payments

This section consists of the current business logic for invoice payment collection along with the new requirement in the target.

During the customer creation, the customer payment terms are decided and linked through an agreement. Payment Terms consist of Payment mode and Payment Responsibility. Once the invoice is generated for a bill cycle against a customer, the amount gets collected following the payment method and terms and get posted in financial system for realization.

Apart from invoice there are various debit document or charges which requires upfront payment i.e. Installation

The section details the payment gateways, payment modes, the interfaces used for collection of payment along with details on the payment method and the relevant corresponding process.

<b>ID#: BSCS-PAY-001</b>	<b>Raised By:</b>
<b>UR: Bill/Invoice Full Payment</b>	
<p><b>Current Flow:</b></p> <p>Web Payment application is used to achieve the functionality of invoice/bill payment for full, partial and advance payment. The invoice is displayed over the web payment application where CSR use the telephone number to search the customer and Web payment shows all customers who owned this phone number ordered by the activation date to choose the needed customer by CSR based on customer's name.</p> <p>The CSR chooses the invoice whose open amount &gt;0 for payment based on customer request. Web payment system displays the needed field based on the payment method selection. Web Payment application calculates the taxes, late fees amount and the final amount for payment based on the customer category</p> <p>Web payment provides option to select a specific invoice to be paid.</p> <p>If the paid amount exceeds the invoice amount, the system will alert the CSR and process the extra amount as an advance payment.</p>	
<p><b>Detailed Requirement:</b></p> <p>The target system should provide the below functionality:</p> <ol style="list-style-type: none"> <li>1. Full Invoice payment – Payment against a specific invoice clearing the total invoice amount for that customer.</li> <li>2. Cashier shall have the option to select the specific invoice for payment transaction</li> <li>3. Payment Method and Payment Amount shall be the information to be captured during full invoice payment.</li> </ol>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

*Note: The taxes part is covered in the section 2.1.5.1.*

<b>ID#: BSCS-PAY-002</b>	<b>Raised By:</b>
<b>UR: Bill/Invoice Partial Payment</b>	
<b>Current Flow:</b>  Web Payment application is used to achieve the functionality of partial invoice/bill payment. The invoice is displayed over the web payment application where CSR use the telephone number to search the customer and Web payment shows all customers who owned this phone number ordered by the activation date to choose the needed customer by CSR based on customer's name. The CSR select the invoice whose open amount >0 for payment based on customer request. Customer pays the partial amount against the invoice and accepts the payment.	
<b>Detailed Requirement:</b>  The target system should provide the below functionality: <ol style="list-style-type: none"> <li>1. Partial invoice payment- System to have option to accept the partial Payment against the invoice clearing a part of the full invoice amount.</li> <li>2. Cashier shall have the option to select the specific invoice for payment transaction</li> <li>3. Payment Method and Payment Amount shall be the information to be captured during partial invoice payment</li> <li>4. Any partial payment will be subjected to collection process based on the invoice due number of days.</li> </ol>	
<i>Note: The taxes part is covered in the section 2.1.5.1.</i>	

<b>ID#: BSCS-PAY-003</b>	<b>Raised By:</b>
<b>UR: Bill/Invoice Advance Payment</b>	
<b>Current Flow:</b>  Web Payment application is used to achieve the functionality of advance invoice/bill payment. The invoice is displayed over the web payment application where CSR use the telephone number to search the customer and Web payment shows all customers who owned this phone number ordered by the activation date to choose the needed customer by CSR based on customer's name. CSR Enters the advance payment amount from the customer. This type of payment adds a credit balance to the customer if all his invoices are paid, this payment will be reflected as a negative customer balance so when a new bill issued the billing process BCH will balance the customer credit with his new issued invoices open amount.	

Prepared (Subject resp)		No.		
Marwan Khoury		1029-FCP 132 1747		
Approved (Document resp)	Checked	Date	Rev	Reference
Ziad Hobeika		2018-07-10	D	

### Detailed Requirement:

The target system should provide the below functionality:

1. Advance payment – Payment against no open invoice with surplus amount as advance payment.
2. Payment Method, Payment type and Payment Amount shall be the information to be captured during advance invoice payment
3. Any Advance payment will be credit balance to the customer if all his invoices are paid, this payment will be reflected as a negative customer balance so when a new bill issued the billing process BCH will balance the customer credit with his new issued invoices open amount.

*Note: The taxes part is covered in the section 2.1.5.1.*

<b>ID#: BSCS-PAY-004</b>	<b>Raised by: -</b>
<b>UR: Deposit Payment</b>	
<p><b>Current Flow:</b></p> <p>For new Syrian customer, if a new line subscription is not possible then the following actions are taken in case customer wants to be added to a 'Waiting List':</p> <ol style="list-style-type: none"> <li>1. A deposit is requested from the customer</li> <li>2. Customer information is captured against a new subscription case id in CRM.</li> <li>3. The amount received from customer is stored in Web-payment application as deposit payment (payment type=D)</li> </ol> <p>When the technical possibility is available and the subscription is resumed, a new customer and contract is created in BSCS</p> <p>The Subscription installation fee [deposit amount stored in Web-payment + delta between actual installation fee and already deposited amount] is posted to BSCS as Credit on customer's account.</p> <p>As such, Deposit is never stored in billing system for New Syrian Customer</p> <p>For an existing Syrian customer, if a new line subscription is not possible then the following actions are taken in case customer wants to be added to a 'Waiting List':</p> <ol style="list-style-type: none"> <li>1. A deposit is requested from the customer and captured in Web-payment application.</li> <li>2. The amount is posted as deposit payment against the existing customer in BSCS.</li> </ol> <p>When the technical possibility is available and the subscription is resumed a new contract for existing customer is created in BSCS</p> <p>The Subscription installation fee [deposit amount stored in Web-payment + delta between actual installation fee and already deposited amount] is posted to BSCS as Credit on customer's account.</p> <p>Already made deposit is also converted to credit on customer's account.</p>	
<b>Detailed Requirement:</b>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

The payment system shall offer the possibility to accept a deposit amount and post it against a prospect or existing customer or customer's contract or a specific service on the contract. The solution shall create a deposit request for the transaction, when deposit is intended against a service on contract or customer's contract and payment shall be posted against the same deposit request. The solution shall provide a unique identifier for each deposit request created, which will be used for further action on this deposit request.

*Note: The taxes part is covered in the section 2.1.5.1.*

<b>ID#: BSCS-PAY-005</b>	<b>Raised by: -</b>
<b>UR: Installation Fee Payment</b>	
<p><b>Current Flow:</b></p> <ol style="list-style-type: none"> <li>If there is no technical possibility for subscription then the subscription can request to go to waiting list and the customer should pay a deposit amount, this amount considered as a deposit not installation payment: <ol style="list-style-type: none"> <li>If the customer is prospect (doesn't have a customer ID in BSCS before) the deposit amount stays pending in the payments table as a <b>deposit</b> payment (Payment_type=D) this payment is mapped with the subscription case ID, this payment stays in payments table and will not be posted to BSCS system till the technical possibility is changed &amp; the subscription is completed then it will be posted to BSCS system with the subscription amount as a <b>credit</b> (advance payment).</li> <li>If the customer is already active in BSCS the payment will be inserted in payments table as a <b>deposit</b> payment (Payment_type=IMD) and will be posted by PMH, cms interface &amp; PTH to the billing system (ORDERHDR_ALL table with status <b>DP</b>) this payment is mapped with the subscription case ID in payments table and in ORDERHDR_ALL table "ohrefnum contains the case ID".</li> </ol> </li> <li>If there is a technical possibility for the subscription: <ol style="list-style-type: none"> <li>For prospect the installation(subscription) amount will stay in the payments table payment (<b>Payment_type=F</b>), this amount is calculated as = subscription amount from CRM (mirrored from BSCS as a subscription fees for telephony service) - all deposits mapped to this subscription case ID in payments table, this amount will not be posted to BSCS till order capture finishes the customer&amp;contract creation in BSCS and returns back the customer_ID to payments table, then "PMH, cms interface &amp; PTH" process the installation payment and all related deposits for that case and post them to create that amounts as credit in BSCS (ORDERHDR_ALL table) as advance payment.</li> <li>For already defined customer in BSCS, the installation amount will be calculated as: read amount from CRM - all mapped deposits to that case ID, this payment will be added to the payments table with (Payment_type=IMF), then it will be posted directly to BSCS through PMH,cms interface &amp; PTH to the orderhdr_all table with the <b>status = DP</b>, when the subscription operation is finished in CRM by order capture, a trigger on the affaires table in CRM inserts</li> </ol> </li> </ol>	


Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference


a new record in PIHTAB\_ALL table to convert that payment in orderhdr\_all table from DP (deposit) to CO (credit).

The deposit amount is defined in web payment which is identical across all customer, whereas the subscription amount is defined in BSCS. When the Deposit amount collected upfront is posted in BSCS as Installation fee, then web payment does a comparison between both the amount and the difference is collected during activation through web payment.

**Detailed Requirement:**

CRM will extract the installation amount to be paid against a specific contract type. CSR will then inform the customer of the amount that he needs to pay prior to contract activation and customer will visit the cashier to fulfil the remaining payment.

 *Note: The taxes part is covered in the section 2.1.5.1.*

<b>ID#: BSCS-PAY-006</b>	<b>Raised by: -</b>
<b>UR: Refund Deposit to Syrian Customer</b>	
<b>Current Flow:</b>  A new line subscription for Syrian customers requires a mandatory deposit payment only when the customer asked to be registered in the waiting list. The deposit payment is stored in Web payment. With new line activation, the deposit payment is posted to BSCS and moved to a credit in customer's account. So, there exists no deposit in case of national customer and hence there is no refund of deposit amount.	
<b>Detailed Requirement:</b>  Target system should offer the possibility to refund the deposit amount in full if customer withdraws its interest from being part of the waiting list.	
 <i>Note: In case of Deposit refund, ST to ensure completion of collection process, if any, towards the customer.</i>	

<b>ID#: BSCS-PAY-007</b>	<b>Raised by: -</b>
<b>UR: Refund Deposit to Non-Syrian Customer</b>	
<b>Current Flow:</b>  A new line subscription for foreign customer requires a mandatory deposit payment. The deposit payment is stored in Web payment and in BSCS. The deposit amount is never converted to credit in customer's account and not balanced against the open amount. Only in	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

case of contract termination, the deposit amount is refunded to customer. The refund is realised via AR module of BSCS application. The refund of deposit is allowed after clearing all current open amount of the customer.

#### Detailed Requirement:

Target system should offer the possibility to refund the deposit amount in full when contract gets terminated and customer should be deactivated.

*Note: In case of Deposit refund, ST to ensure completion of collection process, if any, towards the customer.*

<b>ID#: BSCS-PAY-009</b>	<b>Raised by: -</b>
<b>UR: Credit Balancing Transaction</b>	
<b>Current Flow:</b>	
If the customer has credit, BCH will balance the credit with the generated invoice, also balancing module UCH can balance the credit with any open amount.	
<b>Detailed Requirement:</b>	
The target system shall clear the credit in customer's account against the open amounts. The clearing transaction shall happen in two ways:	
<ol style="list-style-type: none"> <li>1. Clearing transaction of credit against the open amount during billing cycle,</li> <li>2. Clearing transaction of credit against the open amount at daily</li> </ol>	
<i>Note:</i>	

<b>ID#: BSCS-PAY-010</b>	<b>Raised by: -</b>
<b>UR: Instalment Payment</b>	
<b>Current Flow:</b>	
ST customers can make instalment for their bills/Invoice to pay them on different months using web payment application, which provides the possibility to create and administrate a new instalment.	
The invoice is displayed over the web payment application where CSR use the telephone number to search the customer and Web payment shows all customers who owned this phone number ordered by the activation date to choose the needed customer by CSR based on customer's name.	
The CSR chooses the invoice where the instalment payment is visible.	
Web payment system displays the needed field based on the payment method selection.	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

Web Payment application calculates the taxes, late fees amount and the final amount for payment based on the customer category.

#### **Detailed Requirement:**

Invoice raised against a customer can be converted into instalment and the same instalment can be paid from the target system.

Any invoice that is under payment plan should be made visible from the payment application, along with the instalment details.

*Note: Details on instalment creation and related option will be part of Dunning (Credit & Collection Management).*

<b>ID#: BSCS-PAY-011</b>	<b>Raised by: -</b>
<b>UR: Full Payment in Cash</b>	
<b>Current Flow:</b>  Web payment GUI is used to collect the payments and post it in BSCS on periodic basis. The shops in ST accepts payments as cash which is the most popular payment way in Syria.  The Cashier chooses the invoice whose open amount >0 for payment based on customer request. Web payment system displays the “Payment Mode” field as a drop down for the available payment method.	
<b>Detailed Requirement:</b>  While Cashier selects the invoice to be paid, system should give an option to select the method of payment out of which one of the method should be cash. When cash method is chosen, the Cashier shall input an amount equal to the invoice open amount of a customer. In case of excess payment, the solution shall post the remaining amount, post invoice payment, as credit against the customer’s account. This credit in customer’s account shall be used to balance the future open debit in customer’s account.	
<i>Note: The taxes part is covered in the section 2.1.5.1</i>	

<b>ID#: BSCS-PAY-012</b>	<b>Raised by: -</b>
<b>UR: Partial Payment in Cash</b>	



Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

**Current Flow:**

Web payment GUI is used to collect the payments and post it in BSCS on periodic basis. The shops in ST accepts payments as cash which is the most popular payment way in Syria.

The Cashier chooses the invoice whose open amount >0 for payment based on customer request.

Web payment system displays the “Payment Mode” field as a drop down for the available payment method.

**Detailed Requirement:**

While Cashier selects the invoice to be paid, system should give an option to select the method of payment out of which one of the method should be cash. When cash method is chosen, the Cashier shall input an amount less than the invoice open amount of a customer.

System should notify the cashier that the payment amount is less than the invoice amount.

*Note: The taxes part is covered in the section 2.1.5.1*

<b>ID#: BSCS-PAY-013</b>	<b>Raised by: -</b>
<b>UR: Advance Payment in Cash</b>	
<b>Current Flow:</b>	
Web payment GUI is used to collect the payments and post it in BSCS on periodic basis. The shops in ST accepts payments as cash which is the most popular payment way in Syria.	
Cashier can take any amount from the customer and insert it in the system. Once there is any debit generated within the system the amount will get adjusted.	
<b>Detailed Requirement:</b>	
A payment can be assigned to a customer account without reference to any Financial Debit transition reducing the overall balance. The advance payment collected through Cash can be assigned at a later stage to outgoing invoices, deposits or other financial charges.	
<i>Note: The taxes part is covered in the section 2.1.5.1</i>	

<b>ID#: BSCS-PAY-014</b>	<b>Raised by: -</b>
<b>UR: Cheque Payment</b>	
<b>Current Flow:</b>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

ST shops accepts cheques in payment, this cheque should be issued by one of the defined banks in Syria, most of cheque payments are related to companies and officials, the verification process is totally manual and out of CCBS system. The CSR in the shop uses the full cheque amount in payment and keeps the cheque to withdraw the money from the bank.


The bank doesn't read the customer invoices, it only issues a cheque to pay customer's bills for the bill cycles X with amount Y, the customer knows his invoice amount through IVR system or self-care system, so he asks the bank to provide a cheque with an amount to balance his invoices, while the clearance validation is manual.

The customer provides his cheque, cashier keeps the cheque and registers the cheque info in web payment system, taxes are calculated exactly as the bill payment.

#### **Detailed Requirement:**

System should provide an option to pay the invoice payment through Cheque:

1. Customer comes to CSO and provide the Cheque to CSR as a payment towards invoice.
2. Submission of cheque to bank will be done outside CCBS by the CSR or the Finance department.
3. The captured information shall be cheque number, account number and bank name.

 *Note:*

<b>ID#: BSCS-PAY-015</b>	<b>Raised by: -</b>
<b>UR: Bank Transaction Payment</b>	
<b>Current Flow:</b> <p>ST provides this type of payment for all customers, but most of time it is used by official customers, in that case the customer will give a printed document from the bank to pay his invoices.</p> <p>The amount is first entered with the master value as "Bank", "Transaction number" and "date", as a master date with in the web payment system. Once entered as master this record can be used multiple time to pay the invoice amount for different invoices. New record with same bank, transaction number and date cannot be inserted in the master.</p> <p>While using the payment method as bank transaction system will reduce the overall amount from the master.</p> <p>Once the amount is exhausted in the master, no more invoice will be allowed to be paid.</p> <p>The verification of the document is done manually between the bank and ST and out of CCBS system.</p> <p>Web payment GUI is used to collect the payments and post it in BSCS on periodic basis.</p>	
<b>Detailed Requirement:</b> <p>Payment system shall provide a payment method where in the customer will give a printed document from the bank to pay his invoices.</p> <p>The amount is first entered with the master value as "Bank", "Transaction number", "Amount" and "date", as a master data within the payment system. Once entered as master, this record</p>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

can be used multiple time to pay the invoice amount for different invoice. New record with same bank, transaction number and date cannot be inserted in the master.


While using the payment method as bank transaction, system will reduce the overall amount from the master.

System to have the display screen to show current balance and history of the amount used for payment of different invoice.

Once the amount is exhausted in the master, no more invoice will be allowed to be paid.

The verification of the document is done manually between the bank and ST and out of CCBS system.

 Note:

<b>ID#: BSCS-PAY-016</b>	<b>Raised by: -</b>
<b>UR: Unrestricted Payment Cancellation</b>	
<p><b>Current Flow:</b></p> <p>Web payment application gives the ability to cancel the payment from web payment application if the payment insertion date has not exceeded 1 hour. The PMH process will post the payment to BSCS after 1 hour pending in web payment system or based on the payment status and payment type.</p> <p>Some payments couldn't be cancelled because they are from special types like: installation payment, advance payment or if the customer has extracted a clearance report that he has paid all his invoices before. If the payment passed to billing system, the accounting team can cancel it using AR module</p> <p><b>Detailed Requirement:</b></p> <p>Target system shall have an option to cancel the payment, received from a customer. The system shall offer the payment cancellation action to users (special personnel/Head of CSO/Supervisor) only with special access rights.</p> <p>Cheque cancellation or bank transaction cancellation will be handled outside the target system.</p> <p>Upon payment cancellation, target system shall cancel the payment of the invoice and its debit notes when applicable.</p> <p> Note:</p>	

<b>ID#: BSCS-PAY-017</b>	<b>Raised by: -</b>
<b>UR: Payment Receipt Cash</b>	


Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference


**Current Flow:**

The CSR chooses the invoice whose open amount >0 for payment based on customer request. Web Payment application calculates the taxes, late fees amount and the final amount for payment based on the customer category and the invoice amount. Web payment system displays the needed field based on the payment method selection. The CSR enters the paid amount in the field and process the payment. Web payment application prints the payment receipt for the single contract customer, while it prints payment receipt & invoice PDF for the multi contracts customer.

**Detailed Requirement:**

System should be able to generate the receipt upon payment. The generated receipt will be stored within the system and can be reprinted upon customer request with no additional charge. While reprinting of the receipt it should be marked as “Second Copy”.

 *Note: Please refer the Reference 15 for payment receipt.*

<b>ID#: BSCS-PAY-018</b>	<b>Raised by: -</b>
<b>UR: Instalment Payment Receipt</b>	
<b>Current Flow:</b>	
<b>Detailed Requirement:</b>	
System should be able to generate the receipt upon instalment payment.	
The generated receipt will be stored within the system and can be reprinted upon customer request with no additional charge.	
While reprinting of the receipt it should be marked as “Second Copy”.	
 <i>Note: Please refer the Reference 15 for payment receipt. Thermal printer can be used for printing; however, it is mandatory that the thermal printer is any other printer device in the print option.</i>	

<b>ID#: BSCS-PAY-020</b>	<b>Raised by: -</b>
<b>UR: Cheque Bounce</b>	
<b>Current Flow:</b>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

The cheque should be stamped by the central bank that it has the mentioned amount. If the payment amount is > 100.000 SYP the cheque should be stamped by the central bank, else if the amount is less than 100.000 no need to be stamped by the central bank.

In case the amount is less than 100.000 SYP and the cheque remains unclear from the bank then the accounting team manager sends to the customer that his cheque is not valid and sends to the IT team in ST to cancel that payments.


If ST has information they have ability to cancel the payment using AR module and the subsequent TAX amount is also cancelled in web payment.

#### **Detailed Requirement:**

The target system shall

1. Reverse the payment transaction when triggered by cheque bounce event (manual trigger). This should reset the open invoice amount to the original value. This should also reset any tax items applied on payment amount, which is outside of invoice amount.
2. Put the invoice into collection, if the invoice payment due date is crossed. Invoice payment due date will remain the same (invoice generation date + 30 days)

 Note:

<b>ID#: BSCS-PAY-022</b>	<b>Raised by: -</b>
<b>UR: Online Payments</b>	
<b>Current Flow:</b>  ST customer can pay his invoice via Tasdeed e-payment platform. When paid, the payment is registered with-in Tasdeed system. There is a continuous check for new e-payment, each 2 minute on Tasdeed system and once found, the payment information is transferred to BSCS. The transfer process includes a custom solution.	
<b>Detailed Requirement:</b>  The target system shall provide an API that can be used by external online payment applications to post a payment transaction in billing system.	
 Note:	

<b>ID#: BSCS-PAY-023</b>	<b>Raised by: -</b>
<b>UR: Direct Debit Payment</b>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

**Current Flow:**

Islamic bank offers a dedicated process for e-payment for ST customers. This facility is available to all ST customers who has active 'Pay Phone Service' service. For all such customers, Islamic bank reads the open invoice amount in ST CCBS solution and provides a csv file with payment transaction information towards CCBS. The CSV files is parsed and payment transactions are registered in web-payment application.

**Detailed Requirement:**


The target system shall establish a file based interface towards financial systems that will be used to receive the CSV file. System shall create output files that contain payment orders for customers whose payment method is Direct Debit, post invoice generation, containing the invoice information i.e. Customer number, Invoice number, Total amount, Due date. The output files can be transferred to direct debit companies for further processing.


After processing the file shared by CCBS for payments in direct debit companies, a CSV file will be shared towards CCBS system. The CSV shall contain payment information from banks or other financial entities and will be processed to register the payment information in the billing system.


*Note: Please check the Reference 4 for the file format IOH (To be shared from CCBS towards Financial companies) and PIH (file expected from financial companies towards CCBS)*

<b>ID#: BSCS-PAY-024</b>	<b>Raised By: -</b>
<b>UR: Transfer Bills</b>	
<b>Current Flow:</b>	
The CSR can transfer the customer bills to another customer based on ST request for a defined period, the invoices appear on the new customer file in both CRM and payments systems, and the new customer is responsible for the transferred invoices.	
<b>Detailed Requirement:</b>	
Target solution shall offer invoice transfer feature to transfer unpaid invoices from one customer to another customer. With this feature, original invoice document shall be closed and a new invoice document shall be created for the target customer. This transaction information shall be available in database for any extraction purpose. Only accounting team shall be allowed to transfer invoices.	
<i>Note: Invoices that have already been paid either partially or completely cannot be transferred</i>	

Prepared (Subject resp)		No.		
Marwan Khoury		1029-FCP 132 1747		
Approved (Document resp)	Checked	Date	Rev	Reference
Ziad Hobeika		2018-07-10	D	

<b>ID#: BSCS-PAY-026</b>	<b>Raised by: -</b>
<b>UR: Invoice display and download</b>	
<b>Current Flow:</b>	
<b>Detailed Requirement:</b>	
The customer can ask for the invoice, at the time of payment. Cashier should be able to download the same and provide it towards customer.	
 <i>Note:</i>	

<b>ID#: BSCS-PAY-027</b>	<b>Raised by: -</b>
<b>UR: Bulk Invoice Payment</b>	
<b>Current Flow:</b>	
Currently payments are collected through web payment and post collection, payments are stored in Web payment for next one hour and then posted towards BSCS. The process is executed in bulk.	
<b>Detailed Requirement:</b>	
The target system should have an option to pay invoices in bulk. ST to provided data in a predefined format containing Customer identifier, invoice number, Transaction date, amount to be paid (full or partial), Payment Method, GL account number and Comment.	
 <i>Note: Rejection records needs to be rectified by ST and insert for reprocessing.</i>	

<b>ID#: BSCS-PAY-029</b>	<b>Raised by: -</b>
<b>UR: Customer Search Criteria for Payments</b>	
<b>Current Flow:</b>	
<b>Detailed Requirement:</b>	
The target solution shall offer three different search criteria to find the customer who should pay his invoices:	
<ul style="list-style-type: none"> <li>a. Phone number</li> <li>b. Customer Number</li> <li>c. Customer National ID</li> </ul>	
 <i>Note:</i>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

<b>ID#: BSCS-PAY-030</b>	<b>Raised by: -</b>
<b>UR: Invoice payment directly through bank</b>	
<b>Current Flow:</b>	
<b>Detailed Requirement:</b>	
<p>The target solution shall offer customer to pay their invoice directly in bank. Post payment in bank or financial companies, a CSV file will be shared towards CCBS system. The CSV shall contain payment information from banks or other financial entities and will be processed to register the payment information in the billing system.</p>	
<p><i>Note: Please check the Reference 4 for the file format PIH (file expected from financial companies towards CCBS)</i></p>	

<b>ID#: BSCS-PAY-031</b>	<b>Raised by: -</b>
<b>UR: Financial Documents Display and Payment</b>	
<b>Current Flow:</b>	
<p>In the current architecture, Invoice and deposit payments are accepted from WEB payment interface. Where in, web payment does the segregation between tax and payment amount and post the payment amount towards BSCS and tax is posted directly to finance system from Web payment.</p>	
<b>Detailed Requirement:</b>	
<p>The cashier shall have the option to select the documents that the customer wants to pay. Post selection cashier initiates a calculate payment request, that will display the total amount (This will sum all the selected open amounts from the documents i.e. Invoice and debit note linked to that invoice as part of late payment).</p> <p>Post display of the total amount, cashier will enter the amount that the customer wants to pay, which can be full or partial. Cashier will have the option to insert the amount against each invoice or open document selected full or partial, upon amount insert system will calculate the financial tax based on the payment amount and submit for final receipt.</p>	
<p><i>Note:</i></p>	

<b>ID#: BSCS-PAY-032</b>	<b>Raised by: -</b>
<b>UR: Payment Receipt for Cheque and Bank Transaction</b>	




Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference


**Current Flow:**

The CSR chooses the invoice whose open amount >0 for payment based on customer request. Web Payment application calculates the taxes, late fees amount and the final amount for payment based on the customer category and the invoice amount. Web payment system displays the needed field based on the payment method selection. The CSR enters the paid amount in the field and process the payment. Web payment application prints the payment receipt for the single contract customer, while it prints payment receipt & invoice PDF for the multi contracts customer.

**Detailed Requirement:**

System should be able to generate the receipt upon cheque and Bank transaction payment. The generated receipt will be stored within the system and can be reprinted upon customer request with no additional charge. While reprinting of the receipt it should be marked as "Second Copy".


 *Note: Please refer the Reference 15 for payment receipt.*


<b>ID#: BSCS-PAY-033</b>	<b>Raised by: -</b>
<b>UR: Restricted Payment Cancellation</b>	
<b>Current Flow:</b>  Currently payments are collected through web payment and post collection, payments are stored in Web payment for next one hour and then posted towards BSCS. Within this one hour window the user/Cashier will have the option to cancel the payment if not it needs to carried out in BSCS with proper authority.	
<b>Detailed Requirement:</b>  The target solution shall offer functionally to deny the possibility for payment cancellation for specific users after a configurable X minutes (X set to 360) have passed.	
 <i>Note:</i>	


<b>ID#: BSCS-PAY-034</b>	<b>Raised By: -</b>
<b>UR: Transfer Bills Generated on a Given Date</b>	
<b>Current Flow:</b>  	
<b>Detailed Requirement:</b>  Target solution shall offer an extension to the transfer invoice feature where with a given start date and end date, respective invoices shall be selected and transfer to the new customer. The	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

solution shall offer selection of invoices, to be transferred, based on the date range which is input by the Accounting team.

 *Note: Invoices that have already been paid either partially or completely cannot be transferred*

<b>ID#: BSCS-PAY-035</b>	<b>Raised By: -</b>
<b>UR: Transfer Multiple Bills</b>	
<b>Current Flow:</b>	
<b>Detailed Requirement:</b>	
Target solution shall offer transfer of multiple bills at one go from a single source customer to single target customer. With given source customer, solution shall offer to select multiple unpaid invoices for transfer at one shot to one target customer.	
 <i>Note: Invoices that have already been paid either partially or completely cannot be transferred</i>	


<b>ID#: BSCS-PAY-036</b>	<b>Raised By: -</b>
<b>UR: Clearance Report</b>	
<b>Current Flow:</b>	
<b>Detailed Requirement:</b>	
Target solution shall generate a Clearance report upon customer's explicit request. The report generation shall only be possible when the customer has no open amount at customer level.	
The clearance report, once generated for a customer, shall not put any constraint on payment cancelation made by the customer prior to the report generation.	
 <i>Note:</i>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

### 2.1.7 Credit & Collection Management

This section gives and details the processes followed by ST to ensure that its revenue is collected through pre-established collection channels. The section also describes the processes put in place for recovery of past due payments.

Apart from collection process, this section also details out the options the system provides from collection prospective towards customer retention and the additional charges applied for the late invoice clearance.

<b>ID#: BSCS-CCM-002</b>	<b>Raised by: -</b>
<b>UR: Price group wise collection process</b>	
<b>Current Flow:</b>  Collection is based on customer category where:  Price Groups <b>(Normal/ST Employee/Embassy/Journalist/Company/Official Company/Benefited)</b> are subject to collection work flow.  Price groups Category <b>(Official/STE_Lines/Public Company/STE_Coin_BOX/STE Manager/STE_Director)</b> are exempted from collection process.	
<b>Detailed Requirement:</b>  During customer creation, the CSR selects the configured price group as defined in the requirement 'Customer Groups Definition' Post invoice completion and past due date, the collection workflow shall distinguish customers based on their categories and assign the appropriate workflow.	
 <i>Note:</i>	

<b>ID#: BSCS-CCM-003</b>	<b>Raised by: -</b>
<b>UR: Collection Workflow for Residential Market</b>	
<b>Current Flow:</b>  The below mentioned workflow to applied for <b>(Normal/ST Employee/Embassy/Journalist/Company/Official Company/Benefited).</b>  <b>Step1:</b> Invoice generated + <b>40 days' due date</b>	

Prepared (Subject resp)		No.		
Marwan Khoury		1029-FCP 132 1747		
Approved (Document resp)	Checked	Date	Rev	Reference
Ziad Hobeika		2018-07-10	D	

**Step2:** Invoice amount not paid on 41<sup>st</sup> day from the invoice generation

Action: 4% charge calculated on the outstanding invoice amount and posted against customer.

The calculated charge is described as Late payment fee2

**Step3:** Suspension Fee **(40 + 10 Days) 50th day**

Action: Initiate contract suspension for customers having invoice amount > 100 (Excluding Customer Category Embassy) + Late payment fee2 (100 SYP\*Count of active contract)

The suspension/reactivation of the customer contracts follow the following procedure:

The service Call barring not pay service (CBNP) is activated/deactivated on the contract in billing system and on the switch.

The suspended status for the contract in contract history table is not used and the allowed contract statuses are: on hold, active & deactivate

**Step4:** Extraction of report **(40+10+40) Days**

Action: Preparation/Extraction of the report for the customers who are yet to clear the outstanding amount

**Step5:** Deactivate number **(40+10+40 +10) Days**

Action: Post extraction of the report on step4, ST Accounting team chooses the customers who should be deactivated and confirm the deactivation.

**Step6:** Deactivation triggered

Action: Trigger deactivation for the selected customer in SETP5.

The number of days mentioned above are applied to all the customer and not individual to price group.

#### **Detailed Requirement:**

The below mentioned workflow shall be applied for

**(Normal/Martyr Families/Journalist/ST Employee/ Eminent Carrer/ ,Business\_Associations, parties and agencies, Small Offices Home Offices).**

**Below are the steps to be follow for normal invoice:**

**Step1:** Invoice generated + 20 days' due date

**Step2:** Invoice amount not paid on 21<sup>st</sup> day from the invoice generation

Action 1: 4% charge calculated on the outstanding invoice amount per year and posted against Invoice with formula mention in requirement **BSCS-CCM-014**.

Action 2: Suspend the contract or contracts for which the open invoice amount is greater than 100 SYP, a fixed amount 100 SYP to be charge against each contract, regardless the contract type.

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

Under single customer for multiple invoice, if one invoice is unpaid while others are paid, one late fees should be charged on the open invoice while suspension fees will be applied on each contract.

### Step3: Contract Deactivation:


Below two condition needs to be satisfied:


1. The invoice is overdue for total (20 (Invoice Due Date) + 30 Days) 50th day.
2. There is another threshold on deactivation amount, which means the deactivation should be applied only if the open amount of the due invoices > threshold config amount.

The number of days mentioned above are applied to all the customer and not configured for individual price group.


Below are the Points to be followed in case of Bill on demand.


- 1- Due date for BOD invoices should be of 1 day after the issue date, then late fees and suspension fee should be calculated as per the above steps2 mention.
- 2- The deactivation process should be applied on 50<sup>th</sup> day after the issue of invoice.
- 3- All contracts should be deactivated for any unpaid invoice(s) passed both the due amount threshold and due date deactivation threshold as mention in step 3.

 Note:

<b>ID#: BSCS-CCM-005</b>	<b>Raised by: -</b>
<b>UR: Write Off invoice</b>	
<b>Current Flow:</b>  ST decides to write off some invoices when an error in billing cycle occurs or when a decision to clear debts is taken.  ST sends official letter to accounting team to write off specific invoices with the reasons. The official letter is also passed to the oracle financial team "out of CCBS" in case the write off amounts are posted to oracle financial.	
<b>Detailed Requirement:</b>  The target system should have an option to write off any invoice. The write off function shall be offered both at document level and charge item level.  Approval of the write off will be maintained outside the target system between the accounts department and the Cashier. Post approval and the writing off the invoice, the dunning action should be reverted.	
 Note:	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

<b>ID#: BSCS-CCM-006</b>	<b>Raised by: -</b>
<b>UR: Administrative Dispute Raised before Collection</b>	
<p><b>Current Flow:</b></p> <p>The customer is excluded from the dunning process over the invoices that are under dispute. Those invoices are flagged in BSCS and remain so until the dispute have been settled. If the customer complaint was deemed valid, ST use the AR module to write off his invoices.</p>	
<p><b>Detailed Requirement:</b></p> <p>The target system shall exclude the invoice from collection process in case an administrative complaint was raised before collection process has started.</p> <p>Below is an illustrative example Case 1: Customer invoiced, dispute raised within the due date. Action: Invoice should not be considered for any dunning action.</p>	
<p> <i>Note:</i></p>	

<b>ID#: BSCS-CCM-007</b>	<b>Raised By:</b>
<b>UR: Administrative Dispute Raised within Collection</b>	
<p><b>Current Flow:</b></p> <p>The customer is excluded from the dunning process over the invoices that are under dispute. Those invoices are flagged in BSCS and remain so until the dispute have been settled. If the customer complaint was deemed valid, ST use the AR module to write off his invoices.</p> <p>In case the customer is already under dunning process and raised a dispute, system excludes the invoice from next dunning step.</p>	
<p><b>Detailed Requirement:</b></p> <p>The target system shall exclude the invoice from further collection process in case an administrative complaint was raised between any of the collection step.</p> <p>Below is an illustrative example Case 1: Customer invoiced, due date crossed and late payment charged. Action: Invoice should be excluded for further dunning action late payment to be charged or reverted to be taken care by dispute settlement by finance team. Case 2: Customer invoice, due date crossed, late payment charges and suspended. Action: Invoice should be excluded for further dunning action. Late payment charges and suspension will be reverted based on the settlement by finance team.</p>	
<p> <i>Note:</i></p>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

<b>ID#: BSCS-CCM-008</b>	<b>Raised by: -</b>
<b>UR: Instalment Creation</b>	

**Current Flow:**

ST have an option for the customer to pay their invoice in Instalment.

Customer can opt for instalment before or after entering the collection process.  
CSR can make instalment for an invoice for a customer, based on customer request after getting approval from the CSO manager.

1. The CSR chooses the option to make a new instalment and enters the telephone number from a subscriber.
2. The CSR enters the date of the instalment agreement the customers has.
3. Web payment registers the date.
4. The CSR Enters the values of instalments based on the instalment agreement.
5. The CSR chooses the invoice for instalment.
6. Web payment calculates the total amount of the invoice and the late fees amount based on the configured late fee percentage in Dunning module.
7. Web payment provides an option to override the late fees configured percentage.
8. The CSR fills the agreement id and the date of the starting instalment and count of instalments based on the agreement data.
9. The CSR can determine the amount of the first instalment payment as a percentage or amount.
10. Web payment calculates each payment amount based on the filled data (first payment amount, count of instalments, late fees percentage) while the remaining amount is added to the last instalment payment.

**Detailed Requirement:**


The target system shall have an option for creating instalment and attaching it to the end customer for the full or partial open invoice at any step within the collection workflow.  
While creation of instalment, system should also allow to override the late fee charges if applied in the previous steps. Below is an illustrative example:

1. Current invoice amount under dunning is 1000 SYP.
2. In step 1 customer has already been charged with 4% with is 40SYP of 1000 SYP invoice amount.
3. Post step 1 customer has already in step 2 where he was charged 1000SYP along with 4% (40 SYP).
4. Now customer has received the approval of instalment and want to update the late payment from 4% to lower value then CSR can enter 3,2,1, or 0%. on applying this system will recalculate the late payment fee and do the sum.

N.B: Suspension charges cannot be modified.

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

5. With instalment approval customer, can have different outstanding based on the late payment percentage update. (1000+20+100) SYP.
  - invoice amount = 1000 SYP
  - Later payment = 20 SYP (2%)
  - Susp charges = 100 SYP
  - Total outstanding = 1120 SYP
6. The above outstanding 1120 goes as instalment.
7. Case a: Determine the amount of first instalment: 500 SYP. The amount 500 SYP need to be paid by Start date of the instalment and the remaining 620 will be divided equally into number of instalment in "NB Months".  
Case b: Determine the amount in percentage: 20% = 224 SYP. The amount 224SYP need to be paid by Start date of the instalment and the remaining 896 will be divided equally into number of instalment in "NB Months".
8. In case of instalment payment approved at any point from step 1 to step 3, the invoice goes out of the dunning workflow. In case there is an instalment miss the invoice is brought back to the same step where the instalment was started.

 Note:

<b>ID#: BSCS-CCM-009</b>	<b>Raised by: -</b>
<b>UR: Instalment Deactivation</b>	

#### Current Flow:

The CSR can create and deactivate the instalment. ST deactivates the instalment based on the customer's request, or if the instalment report shows the customer is not committed in his payments

Deactivating the instalment will flag the instalment as deactivated in the instalment table.

Web payment provides the possibility to displays a list of instalments amounts and due date for each one of them.

#### Detailed Requirement:

Once the instalment plan is attached to the customer, system shall have an option to deactivate it in the below cases:

1. Deactivation due to Non-payment
2. Voluntarily closure: Upon full payment by the customer system should collect open amount for all instalment from the customer and close the instalment plan.


System shall not provide any option to reactivate the same instalment plan and shall provide an option to deactivate the instalment at any time within the instalment process.


Deactivation of installment due to non-payment or manual deactivation by ST operations, shall lead to reversal of the discount on the late fees given during the installment creation.

For any kind of manual deactivation by ST operation system shall give an option to capture the reason of deactivation as a statement for future reference.



Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

<p> <i>Note: The instalment invoices are not considered in Dunning process, so the customer will not be suspended or deactivated based on any instalment invoice.</i></p>				

<b>ID#: BSCS-CCM-010</b>	<b>Raised by: -</b>
<b>UR: Instalment Due Date Defaulter</b>	
<p><b>Current Flow:</b></p> <p>The due date for instalment is calculated based on the instalment business logic while creating the installment. A report is extracted by ST to find the Instalment defaulter. Below are the steps carried out:</p> <ol style="list-style-type: none"> <li>Extract the report manually for the defaulter.</li> <li>ST decide upon the grace period to be provided to customer.</li> <li>Post the grace period ST deactivate the instalments pending.</li> <li>Overall outstanding in the invoice pending amount is subject to dunning cycle immediately.</li> </ol>	
<p><b>Detailed Requirement:</b></p> <p>Instalment due date is allocated against each invoice during the instalment creation. In case of any non-payment with in the instalment due date, system shall provide the operations team with the possibility to extract the defaulter information.</p>	
<p> <i>Note:</i></p>	


<b>ID#: BSCS-CCM-011</b>	<b>Raised by: -</b>
<b>UR: Bulk Write Off invoice</b>	
<p><b>Current Flow:</b></p> <p>Current system doesn't have any Bulk write off functionality.</p>	


Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference


**Detailed Requirement:**

The target system should have an option to write off invoices documents in bulk. ST to provided data in a predefined format containing Customer identifier, invoice number, amount to be written off (full or partial), GL account number and Comment at minimum.

Approval of the write off will be maintained outside the target system between the accounts department and the CSR.


 *Note: Rejection records needs to be rectified by ST and insert for reprocessing.*


<b>ID#: BSCS-CCM-012</b>	<b>Raised by: -</b>
<b>UR: Revoke Suspension in Collection</b>	
<b>Current Flow:</b>	
<b>Detailed Requirement:</b>	
System shall offer revoke suspension in the below mention scenario: a. With clearing of overdue debts through payment or write off or adjustments. b. With subscription of instalment plan and paying of first instalment.	
 <i>Note:</i>	

<b>ID#: BSCS-CCM-013</b>	<b>Raised by: -</b>
<b>UR: Exception of collection action execution</b>	
<b>Current Flow:</b>	
<b>Detailed Requirement:</b>	
The system should provide the ability to stop suspension on holidays and vacations but the late fees steps should be applied as planned.  For e.g.: System should able to provide a configurable option to skip action on National holidays and long vacation like Ramadan.	
 <i>Note:</i>	


<b>ID#: BSCS-CCM-014</b>	<b>Raised by: -</b>
--------------------------	---------------------

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

<b>UR: Late Payment Fee calculation</b>	
<b>Current Flow:</b>	
<b>Detailed Requirement:</b>	
<p>Late fees are applicable once the invoice is due. Late fee calculation will be indefinite if the open amount is not paid. Even in situation where the customer has all his connections terminated, late fee calculation shall continue.</p> <p>System shall offer the function to calculate late payment fee monthly for each overdue invoice including TAX. The calculation shall be based on the formula <i>Late Fee = (1 / 12) * 0.04 * bill remaining amount</i></p> <p>Illustration with an example: <i>Invoice generated of 1000 SYP on 1st Jan and due date of the invoice is 20st Jan. Let's assume customer did not paid the invoice.</i> <i>on 21st Jan - Late fee calculated as <math>[(1 / 12) * 0.04 * 1000 = 3.33</math></i> <i>on 21st Feb - Late fee calculated as <math>[(1 / 12) * 0.04 * 1000 = 3.33</math></i> <i>on 21st Mar - late fee calculated as <math>[(1 / 12) * 0.04 * 1000 = 3.33</math></i> <i>Customer comes to pay on 25th Mar, total late fee to be paid = 3.33 + 3.33 + 3.33 = 9.99 SYP along with Invoice amount 1000 SYP.</i></p> <p>System shall generate a separate financial document for each Late fee applied to an Invoice and shall maintain a reference to the same Invoice.</p>	
 <i>Note:</i>	

<b>ID#: BSCS-CCM-015</b>	<b>Raised by: -</b>
<b>UR: Late Payment Fee Display</b>	
<b>Current Flow:</b>	
<b>Detailed Requirement:</b>	
<p>System shall offer a consolidated view for each invoice with all associated late payment fees. The view shall contain the open invoice amount, late fee amount, total invoice amount including late fee amount.</p> <p>At the time of payment of a selected invoice, system shall display the sum of the invoice along with its debit notes to the cashier.</p>	
 <i>Note:</i>	

Prepared (Subject resp)		No.		
Marwan Khoury		1029-FCP 132 1747		
Approved (Document resp)	Checked	Date	Rev	Reference
Ziad Hobeika		2018-07-10	D	

ID#: BSCS-CCM-016				Raised by: -			
UR: Late Payment Fee collection							
Current Flow:							
Detailed Requirement:							
<p>System shall offer the capability to clear late payment fee first and open invoice amount second, at the time of payment against a specific open invoice.</p> <p>Irrespective of partial or full payment against an invoice, late fee shall be cleared first. With partial payment against invoice, late fee shall be calculated further till the time invoice is paid fully including late fee.</p> <p>Follow the below example for the late fee collection and adjustment.</p>							
Open Invoice Amount	Due Date	Payment Date	Late Fee	Payment	Remaining Invoice Amount	Remaining Late Fee	Cash On Account
1000	10th Jan, 2018	1st Feb, 2018	40 SYP	500	540	0	
540	10th Jan, 2018	1st Mar, 2018	22 SYP	500	62	0	
62	10th Jan, 2018	1st Apr, 2018	3 SYP	100	0	0	35
 Note: Payment amount should be greater than late payment fee.							

<b>ID#: BSCS-CCM-017</b>	<b>Raised by: -</b>
<b>UR: Collection Workflow for Business Market</b>	
<b>Current Flow:</b>	
<p>The below mentioned workflow to applied for  <b>(Normal/ST Employee/Embassy/Journalist/Company/Official Company/Benefited).</b></p>	
<p><b>Step1:</b> Invoice generated + <b>40 days' due date</b></p>	
<p><b>Step2:</b> Invoice amount not paid on 41<sup>st</sup> day from the invoice generation  Action: 4% charge calculated on the outstanding invoice amount and posted against customer.  The calculated charge is described as Late payment fee2</p>	
<p><b>Step3:</b> Suspension Fee <b>(40 + 10 Days) 50th day</b>  Action: Initiate contract suspension for customers having invoice amount &gt; 100 (Excluding Customer Category Embassy) + Late payment fee2 (100 SYP*Count of active contract)  The suspension/reactivation of the customer contracts follow the following procedure:  The service Call barring not pay service (CBNP) is activated/deactivated on the contract in billing system and on the switch.  The suspended status for the contract in contract history table is not used and the allowed contract statuses are: on hold, active &amp; deactivate</p>	
<p><b>Step4:</b> Extraction of report <b>(40+10+40) Days</b></p>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

Action: Preparation/Extraction of the report for the customers who are yet to clear the outstanding amount

**Step5:** Deactivate number (40+10+40 +10) Days

Action: Post extraction of the report on step4, ST Accounting team chooses the customers who should be deactivated and confirm the deactivation.

**Step6:** Deactivation triggered

Action: Trigger deactivation for the selected customer in SETP5.

The number of days mentioned above are applied to all the customer and not individual to price group.

**Detailed Requirement:**

The below mentioned workflow shall be applied for  
**(Medium or large company/).**

**Below are the steps to be follow for normal invoice :**

**Step1:** Invoice generated + 20 days' due date

**Step2:** Invoice amount not paid on 21st day from the invoice generation

Action 1: 4% charge calculated on the outstanding invoice amount per year and posted against Invoice with formula mention in requirement **BSCS-CCM-014**.

Action 2: Suspend Voice and ADSL contract or contracts for which the open invoice amount is greater than 100 SYP, a fixed amount 100 SYP for each contract type, regardless the contract type.

Under single customer for multiple invoice, if one invoice is unpaid while others are paid, one late fees should charge against open invoice while suspension fees will be applied on each contract.

**Step3:** Contract Deactivation:

Below two condition needs to be satisfied:

1. The invoice is overdue for total (20 (Invoice Due Date) + 30 Days) 50th day.
2. There is another threshold on deactivation amount, which means the deactivation should be applied only if the open amount of the due invoices>threshold config amount.

The number of days mentioned above are applied to all the customer and not configured for individual price group.

Below are the Points to be followed in case of Bill on demand.

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

- 1- Due date for BOD invoices should be of 3 days after the issue date, then late fees and suspension fee should be calculated as per the above steps2 mention.
- 2- The deactivation process should be applied on 50<sup>th</sup> day after the issue of invoice.
- 3- All contracts should be deactivated for any unpaid invoice(s) passed both the due amount threshold and due date deactivation threshold as mention in step 3.

*Note: The above workflow is designed keeping in mind that the target solution will have different contract for different service line under the same customer. Having said so, VOICE, ADSL, LL and GHSDSL will be segregated into different contract with separate invoice.*

<b>ID#: BSCS-CCM-018</b>	<b>Raised by: -</b>
<b>UR: Collection Workflow for Official Market</b>	
<p><b>Current Flow:</b></p> <p>The below mentioned workflow to applied for <b>(Normal/ST Employee/Embassy/Journalist/Company/Official Company/Benefited).</b></p> <p><b>Step1:</b> Invoice generated + <b>40 days' due date</b></p> <p><b>Step2:</b> Invoice amount not paid on 41<sup>st</sup> day from the invoice generation Action: 4% charge calculated on the outstanding invoice amount and posted against customer. The calculated charge is described as Late payment fee2</p> <p><b>Step3:</b> Suspension Fee <b>(40 + 10 Days) 50th day</b> Action: Initiate contract suspension for customers having invoice amount &gt; 100 (Excluding Customer Category Embassy) + Late payment fee2 (100 SYP*Count of active contract) The suspension/reactivation of the customer contracts follow the following procedure: The service Call barring not pay service (CBNP) is activated/deactivated on the contract in billing system and on the switch. The suspended status for the contract in contract history table is not used and the allowed contract statuses are: on hold, active &amp; deactivate</p> <p><b>Step4:</b> Extraction of report <b>(40+10+40) Days</b> Action: Preparation/Extraction of the report for the customers who are yet to clear the outstanding amount</p> <p><b>Step5:</b> Deactivate number <b>(40+10+40 +10) Days</b> Action: Post extraction of the report on step4, ST Accounting team chooses the customers who should be deactivated and confirm the deactivation.</p> <p><b>Step6:</b> Deactivation triggered Action: Trigger deactivation for the selected customer in SETP5.</p>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

The number of days mentioned above are applied to all the customer and not individual to price group.

#### Detailed Requirement:

The below mentioned workflow shall be applied for  
**(Eco-Official-Official, Eco-Official-Official\_Special, Eco-Official-Official\_Special\_Deal, Eco-Official-Telecom\_offices\_ST\_Offices, Admin-Official-Official, Admin-Official-Official\_Special, Admin-Official-Official\_Special\_Deal, Admin-Official-Telecom\_offices\_ST\_Offices).**

**Below are the steps to be follow for normal invoice:**

**Step1:** Invoice generated + 20 days' due date

**Step2:** NO SUSPENSION

**Step3:** NO Contract Deactivation

*Note: The above workflow is designed keeping in mind that the target solution will have different contract for different service line under the same customer. Having said so, VOICE, ADSL, LL and GHSDSL will be segregated into different contract with separate invoice.*

<b>ID#: BSCS-CCM-019</b>	<b>Raised by: -</b>
<b>UR: Collection Workflow for VIP Market</b>	
<b>Current Flow:</b>  The below mentioned workflow to applied for <b>(Normal/ST Employee/Embassy/Journalist/Company/Official Company/Benefited).</b>  <b>Step1:</b> Invoice generated + <b>40 days' due date</b>  <b>Step2:</b> Invoice amount not paid on 41 <sup>st</sup> day from the invoice generation Action: 4% charge calculated on the outstanding invoice amount and posted against customer. The calculated charge is described as Late payment fee2  <b>Step3:</b> Suspension Fee <b>(40 + 10 Days) 50th day</b> Action: Initiate contract suspension for customers having invoice amount > 100 (Excluding Customer Category Embassy) + Late payment fee2 (100 SYP*Count of active contract) The suspension/reactivation of the customer contracts follow the following procedure: The service Call barring not pay service (CBNP) is activated/deactivated on the contract in billing system and on the switch.	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

The suspended status for the contract in contract history table is not used and the allowed contract statuses are: on hold, active & deactivate

**Step4:** Extraction of report **(40+10+40)** Days

Action: Preparation/Extraction of the report for the customers who are yet to clear the outstanding amount

**Step5:** Deactivate number **(40+10+40 +10)** Days

Action: Post extraction of the report on step4, ST Accounting team chooses the customers who should be deactivated and confirm the deactivation.

**Step6:** Deactivation triggered

Action: Trigger deactivation for the selected customer in SETP5.

The number of days mentioned above are applied to all the customer and not individual to price group.

**Detailed Requirement:**

The below mentioned workflow shall be applied for  
**(Government employee or diplomat/Embassy/ Key Account).**

**Below are the steps to be follow for normal invoice:**

**Step1:** Invoice generated + 20 days' due date

**Step2:** Invoice amount not paid on 21st day from the invoice generation

Action 1: 4% charge calculated on the outstanding invoice amount per year and posted against Invoice with formula mention in requirement **BSCS-CCM-014**.

Action 2: Suspend the contract or contracts for which the open invoice amount is greater than 100 SYP, a fixed amount 100 SYP to be charge against each contract, regardless the contract type

Under single customer for multiple invoice, if one invoice is unpaid while others are paid, one late fees should charge for the open invoice while suspension fees will be applied on each contract.

**Step3:** Soft suspension for VOICE Contract on invoice due Date + 3 days i.e. 24<sup>th</sup> day after invoice generation.

System should enable the outgoing barring for the VOICE Contract.

**Step4:** Contract suspension for VOICE Contract on invoice due date + 3 days + 5 days i.e. 29<sup>th</sup> day after invoice generation, for which the open invoice amount is greater than 100 SYP. Dunning system will Suspend the VOICE Contract.



Prepared (Subject resp)		No.		
Marwan Khoury		1029-FCP 132 1747		
Approved (Document resp)	Checked	Date	Rev	Reference
Ziad Hobeika		2018-07-10	D	

**Step5:** ADSL contract suspension on invoice due date + 3 days + 5 days + 8 days i.e. 36<sup>th</sup> day after invoice generation, for which the open invoice amount is greater than 100 SYP. Dunning system will suspend the ADSL contract.

**Step6:** Contract Deactivation:

Below two condition needs to be satisfied:

1. The invoice is overdue for total (20 (Invoice Due Date) + 30 Days) 50th day.
2. There is another threshold on deactivation amount, which means the deactivation should be applied only if the open amount of the due invoices > threshold config amount.

The number of days mentioned above are applied to all the customer and not configured for individual price group.

Below are the Points to be followed in case of Bill on demand.

1- Due date for BOD invoices should be of 1 days after the issue date, rest of the collection process remains same as normal invoice mention in the above steps.

*Note: The above workflow is designed keeping in mind that the target solution will have different contract for different service line under the same customer. Having said so, VOICE, ADSL, LL and GHSDSL will be segregated into different contract with separate invoice.*

<b>ID#: BSCS-CCM-020</b>	<b>Raised by: -</b>
<b>UR: Collection Workflow for Residential Market - ST Manager</b>	
<p><b>Current Flow:</b></p> <p>The below mentioned workflow to applied for <b>(Normal/ST Employee/Embassy/Journalist/Company/Official Company/Benefited).</b></p> <p><b>Step1:</b> Invoice generated + <b>40 days' due date</b></p> <p><b>Step2:</b> Invoice amount not paid on 41<sup>st</sup> day from the invoice generation Action: 4% charge calculated on the outstanding invoice amount and posted against customer. The calculated charge is described as Late payment fee2</p> <p><b>Step3:</b> Suspension Fee <b>(40 + 10 Days) 50th day</b> Action: Initiate contract suspension for customers having invoice amount &gt; 100 (Excluding Customer Category Embassy) + Late payment fee2 (100 SYP*Count of active contract) The suspension/reactivation of the customer contracts follow the following procedure: The service Call barring not pay service (CBNP) is activated/deactivated on the contract in billing system and on the switch.</p>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

The suspended status for the contract in contract history table is not used and the allowed contract statuses are: on hold, active & deactivate

**Step4:** Extraction of report **(40+10+40)** Days

Action: Preparation/Extraction of the report for the customers who are yet to clear the outstanding amount

**Step5:** Deactivate number **(40+10+40 +10)** Days

Action: Post extraction of the report on step4, ST Accounting team chooses the customers who should be deactivated and confirm the deactivation.

**Step6:** Deactivation triggered

Action: Trigger deactivation for the selected customer in SETP5.

The number of days mentioned above are applied to all the customer and not individual to price group.

**Detailed Requirement:**

The below mentioned workflow shall be applied for  
**(ST Manager and ST Director)**

**Step1:** Invoice generated + 20 days' due date

**Step2:** Invoice amount not paid on 21st day from the invoice generation

Action 1: 4% charge calculated on the outstanding invoice amount per year and posted against Invoice with formula mention in requirement **BSCS-CCM-014**.

Action 2: Fixed amount 100 SYP for each contract is applied regardless the contract type.

Under single customer for multiple invoice, if one invoice is unpaid while others are paid one late fees should charge for the open invoice while suspension fees will be applied on each contract.

**Step3:** Contract Deactivation:

NO Deactivation for any contract for customer with category ST Management.


The number of days mentioned above are applied to all the customer and not configured for individual price group.


Below are the Points to be followed in case of Bill on demand.

1- Due date for BOD invoices should be of 1 days after the issue date, rest of the collection process remains same as normal invoice mention in the above steps.

 *Note:*

Prepared (Subject resp)		No.		
Marwan Khoury		1029-FCP 132 1747		
Approved (Document resp)	Checked	Date	Rev	Reference
Ziad Hobeika		2018-07-10	D	

<b>ID#: BSCS-CCM-021</b>	<b>Raised by: -</b>
<b>UR: Late Fee Payment</b>	
<b>Current Flow:</b>	
<b>Detailed Requirement:</b>	
<p>The payment shall be allowed for the sum of Invoice and its debit notes. Separate payment shall not be allowed for debit notes. Upon payment, system shall balance debit notes on priority followed by the invoice. A payment receipt shall be generated with details of Invoice and its debit notes.</p>	
 <i>Note:</i>	


<b>ID#: BSCS-CCM-022</b>	<b>Raised by: -</b>
<b>UR: Late fee Adjustment</b>	
<b>Current Flow:</b>	
<b>Detailed Requirement:</b>	
<p>The target system shall allow to waive-off the late fee partially or fully. The system shall offer account adjustment financial transaction, which shall adjust the late fee amount as per the need. Such adjustment transactions shall also be reversed, when needed.</p>	
 <i>Note:</i>	


<b>ID#: BSCS-CCM-023</b>	<b>Raised by: -</b>
<b>UR: Create Instalment Template</b>	
<b>Current Flow:</b>	
<b>Detailed Requirement:</b>	
<p>The target system shall offer the capability to configure instalment template. Following Basic information shall be provided for creation of instalment template.</p> <p>a. Payment Interval - Shall define total number of instalment payments</p>	


Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

- b. First payment in - Defines when first payment shall be made.
- c. Total open amount

The instalment template shall be used to calculate the instalment details.

 *Note:*

<b>ID#: BSCS-CCM-024</b>	<b>Raised by: -</b>
<b>UR: Read Instalment Template</b>	
<b>Current Flow:</b>	
<b>Detailed Requirement:</b>	
The target system shall offer web service to read details of defined installment template. The web service shall be used by CRM to fetch and display the instalment template details.	
 <i>Note:</i>	


<b>ID#: BSCS-CCM-025</b>	<b>Raised by: -</b>
<b>UR: Instalments Plan for Invoice</b>	
<b>Current Flow:</b>	
<b>Detailed Requirement:</b>	
The target system shall offer the capability to have instalment plan per Invoice.	
 <i>Note:</i>	


<b>ID#: BSCS-CCM-026</b>	<b>Raised by: -</b>
<b>UR: Instalment Due Date</b>	
<b>Current Flow:</b>	
<b>Detailed Requirement:</b>	
The target system shall offer the capability to convert an open invoice into configurable number of instalments. Each instalment shall have its due date and shall be a configurable action inside instalment process. As part of instalment due dates, first instalment shall have a due date of 5	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

days, from the date of instalment creation. The payment due date for rest of the instalments shall be 7 days, from the date of scheduled payment date.

 Note:

<b>ID#: BSCS-CCM-027</b>	<b>Raised by: -</b>
<b>UR: Non-Payment of First Instalment</b>	
<b>Current Flow:</b>	
<b>Detailed Requirement:</b>	
The target system shall de-activate the instalment plan, assigned to the invoice, if first instalment is not paid within the due date, which is 5 days from the date of instalment plan creation. In addition, system shall reverse the part of late fee amount, which was discounted/reduced at the time of instalment plan creation and assignment, if any.	
 Note:	


<b>ID#: BSCS-CCM-028</b>	<b>Raised by: -</b>
<b>UR: Non-Payment of Single Instalment excluding First Instalment</b>	
<b>Current Flow:</b>	
<b>Detailed Requirement:</b>	
The target system shall soft-suspend all customer's contracts if any instalment, excluding the first instalment, is not paid within due date, which is 7 days from the date of scheduled payment date. The soft suspend action shall bar the outgoing calls for telephone service and shall be applicable to all the voice contracts. System shall not charge any suspension fee in this case.	
 Note: Soft suspension refers to barring outgoing calls for the subscriber	

<b>ID#: BSCS-CCM-029</b>	<b>Raised by: -</b>
<b>UR: Non-payment of back-to-back Instalments excluding First Instalment</b>	
<b>Current Flow:</b>	
<b>Detailed Requirement:</b>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

The target system shall de-activate the instalment plan, assigned to the invoice, if back-to-back instalments not paid. The system shall reverse the late fee part, which was discounted at the time of instalment plan creation against the invoice, if any. The system shall push the invoice back to collection and normal actions shall be carried out.

 Note:

<b>ID#: BSCS-CCM-030</b>	<b>Raised by: -</b>
<b>UR: Late payment reduction for specific period</b>	
<p><b>Current Flow:</b> With current architecture in Web payment late payment can be reduced by configured percentage i.e. 10% or 20% or 50% or 0% of its original value, in case the payment for the open invoice amount along with late fee is cleared within specific dates.</p> <p><b>Detailed Requirement:</b> The target system shall have option to reduce the late fee posted against the invoice in case the payment for the pending invoice is made within a particular defined time period.  For the above requirement, the reduction percentage of late fee and the dates between which the reduction to be carried out during payment shall be configurable.  For e.g:  <ol style="list-style-type: none"> <li>1. On 1<sup>st</sup> of Jan late fee posted as 200 SYP.</li> <li>2. On 5<sup>th</sup> of Jan ST decide to configure 50% reduction of late fee in case the invoice is paid between 10<sup>th</sup> JAN till 20<sup>th</sup> of JAN.</li> <li>3. Customer comes and pay invoice on 10<sup>th</sup> of JAN, then customer is subjected to pay 100 SYP a late fee charges.</li> </ol> </p>	
 Note:	

<b>ID#: BSCS-CCM-031</b>	<b>Raised by: -</b>
<b>UR: Collection Workflow for Official-pay-invoices</b>	
<p><b>Current Flow:</b> The below mentioned workflow to applied for <b>(Normal/ST Employee/Embassy/Journalist/Company/Official Company/Benefited).</b></p> <p><b>Step1:</b> Invoice generated + <b>40 days' due date</b></p> <p><b>Step2:</b> Invoice amount not paid on 41<sup>st</sup> day from the invoice generation</p>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

Action: 4% charge calculated on the outstanding invoice amount and posted against customer. The calculated charge is described as Late payment fee2

**Step3: Suspension Fee (40 + 10 Days) 50th day**

Action: Initiate contract suspension for customers having invoice amount > 100 (Excluding Customer Category Embassy) + Late payment fee2 (100 SYP\*Count of active contract)

The suspension/reactivation of the customer contracts follow the following procedure:

The service Call barring not pay service (CBNP) is activated/deactivated on the contract in billing system and on the switch.

The suspended status for the contract in contract history table is not used and the allowed contract statuses are: on hold, active & deactivate

**Step4: Extraction of report (40+10+40) Days**

Action: Preparation/Extraction of the report for the customers who are yet to clear the outstanding amount

**Step5: Deactivate number (40+10+40 +10) Days**

Action: Post extraction of the report on step4, ST Accounting team chooses the customers who should be deactivated and confirm the deactivation.

**Step6: Deactivation triggered**

Action: Trigger deactivation for the selected customer in SETP5.

The number of days mentioned above are applied to all the customer and not individual to price group.

**Detailed Requirement:**

The below mentioned workflow shall be applied for

**(Eco-Official-Pay-invoices and Admin-Official-Pay-invoices).**

**Below are the steps to be follow for normal invoice:**

**Step1:** Invoice generated + 20 days' due date

**Step2:** Invoice amount not paid on 21st day from the invoice generation

Action 1: 4% charge calculated on the outstanding invoice amount per year and posted against Invoice with formula mention in requirement **BSCS-CCM-014**.

Action 2: Suspend the contract or contracts for which the open invoice amount is greater than 100 SYP, a fixed amount 100 SYP to be charge against each contract, regardless the contract type.

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

Under single customer for multiple invoice, if one invoice is unpaid while others are paid, one late fees should be charged on the open invoice while suspension fees will be applied on each contract.

**Step3:** Contract Deactivation:  
NO Deactivation.

Below are the Points to be followed in case of Bill on demand.


1- Due date for BOD invoices should be of 3 day after the issue date, then late fees and suspension fee should be calculated as per the above steps2 mention.

 *Note:*



Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

## 2.1.8 Revenue Assurance

<b>ID#: BSCS-RAS-001</b>	<b>Raised by: -</b>
<b>UR: Subscription Information</b>	
<p><b>Current Flow:</b></p> <p>Fraud system is provided with following information:</p> <ol style="list-style-type: none"> <li>1. Customer and Contract Information</li> <li>2. Service information contract wise</li> <li>3. Unpaid bills</li> </ol> <p>This information is extracted from Interdbx database in form of files and transfer to fraud system vis ftp. The frequency of the action is once in each bill cycle and executed before each bill cycle execution.</p>	
<p><b>Detailed Requirement:</b></p> <p>Target system should:</p> <ol style="list-style-type: none"> <li>1. Establish a file-based interface towards fraud system.</li> <li>2. Extract Customer information, Contract information, Service information contract wise and unpaid bill information from billing system and provide this information towards Fraud system.</li> <li>3. Execute the action once in every bill cycle and before the bill cycle execution</li> </ol>	
<p> <i>Note:</i></p>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

### 2.1.9

### Big Data Analytics and Business Intelligence

<b>ID#: BSCS-BDA-001</b>	<b>RAISED BY: -</b>
<b>UR: Payments Report</b>	
<p><b>Current Flow: -</b></p> <p>This report is generated for payments for a specific period, out of web-payment application. The report contains the following information,</p> <ul style="list-style-type: none"> <li>- Payment amount</li> <li>- date of transaction</li> <li>- bill cycle</li> <li>- Customer name</li> <li>- Customer Id</li> <li>- Phone number</li> <li>- Customer category</li> </ul> <p>The source information is available in billing system, which is cloned to INTERDBX database on daily basis and the information in INTERDBX is used by web-payment to generate the report. Report is generated in an excel file.</p>	
<p><b>Detailed Requirement: -</b></p> <p>Target solution shall provide a GUI to generate a report on payments. The GUI shall accept the following information as an input:</p> <ol style="list-style-type: none"> <li>1. Start date</li> <li>2. End date</li> <li>3. Province (optional and drop down should have option to select all province together)</li> <li>4. CSO (optional and drop down should have option to select all CSO together)</li> <li>5. User (optional and the drop down should have option to select all user together)</li> </ol> <p>The user field is used where in a separate user/supervisor is extraction the report for another user, then the report should mention the user for which the report was extracted and the user who has extracted the report.</p> <p>The report should have the below mentioned header format</p> <ul style="list-style-type: none"> <li>➤ ST Logo</li> <li>➤ Syrian Telecom (Static text)</li> <li>➤ Name of the report</li> <li>➤ The name of the Centre/CSO/Agency</li> <li>➤ Name of Cashier</li> <li>➤ Report extraction date</li> <li>➤ This report has been reprinted by the Customer Service Officer &lt;Name of the officer&gt; on &lt;Date&gt;</li> </ul>	

Prepared (Subject resp)		No.		
Marwan Khoury		1029-FCP 132 1747		
Approved (Document resp)	Checked	Date	Rev	Reference
Ziad Hobeika		2018-07-10	D	

The report should have the below mention output:

1. Customer ID
2. Customer Name (First, Middle, Last name)
3. Telephone number
4. Date of payment
5. Bill Number
6. Paid for invoice number
7. Total Amount paid
8. Stamp and Taxes
9. The amount paid
- 10.OHREFNUM (value in case of invoice)
- 11.Late fee (value in case of invoice late fee)
- 12.Suspension fee (value in case of any suspension fee changed)
- 13.Financial stamp (value of the financial amount charged)
- 14.Province
- 15.CSO
- 16.USER

The above fields need to be consolidated based on the below types of payment.

1. Cash
2. Cheque
3. Bank Transaction


Above three methods need to be consolidated under below mention payments.

1. Invoice payment
2. Advance payment
3. Service/Item sale.
4. Deposit payment

The report should have below SUM items at the footer

- Total sum per transaction type e.g. cash, cheque, bank transaction
- Total sum per payment type e.g. invoice payment, advance payment, instalment fee payment, advance deposit payment, cancelled payment.
- Total sum amount of all transaction and payment type.

Report shall generate an excel file and PDF format.

 Note:

<b>ID#: BSCS-BDA-002</b>	<b>RAISED BY: -</b>
<b>UR: Cancelled Payment Report</b>	
<b>Current Flow: -</b>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

This report is generated for cancelled payment for a specific period, out of web-payment application. The report contains the following information,

- Cancelled amount
- date of cancellation
- reason id
- bill cycle
- Customer name
- Customer Id
- Phone number
- customer category

The source information is available in billing system, which is cloned to INTERDBX database on daily basis and the information in INTERDBX is used by web-payment to generate the report. Report is generated in an excel file.

**Detailed Requirement: -**

Target solution shall provide a GUI to generate a report on payments. The GUI shall accept the following information as an input:

1. Start date
2. End date
3. Province (optional and drop down should have option to select all province together)
4. CSO (optional and drop down should have option to select all CSO together)
5. User (optional and the drop down should have option to select all user together)

The user field is used where in a separate user/supervisor is extraction the report for another user, then the report should mention the user for which the report was extracted and the user who has extracted the report.

The report should have the below mentioned header format

- ST Logo
- Syrian Telecom (Static text)
- Name of the report
- The name of the Centre/CSO/Agency
- Name of Cashier:
- Report extraction date
- This report has been reprinted by the Customer Service Officer <Name of the officer> on <Date>

The report shall contain the following information in the output,

1. Customer ID.
2. Customer Name (First, Middle and Last)
3. Official
4. Telephone Number

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

5. Date of Payment
6. Amount paid
7. Province
8. CSO
9. USER


The above fields need to be consolidated based on the below types of payment.

1. Cash
2. Cheque
3. Bank Transaction

The report should have below SUM items at the footer

- Total sum per transaction type e.g. cash, cheque, bank transaction
- Total sum amount of all transaction type.

The solution shall generate an excel file and PDF with the output information.

 Note:

<b>ID#: BSCS-BDA-003</b>	<b>RAISED BY: -</b>
<b>UR: Suspended Numbers Report</b>	
<b>Current Flow: -</b>  In alignment with Bill cycle, this report is generated for suspended numbers, out of web-payment application. The information is grouped based on agency, bill cycle or province. The source information is available in billing system, which is cloned to INTERDBX database on daily basis and the information in INTERDBX is used by web-payment to generate the report.	
<b>Detailed Requirement: -</b>  Target solution shall provide a GUI to generate a report on payments. The GUI shall accept the following information as an input: <ol style="list-style-type: none"> <li>1. Start date</li> <li>2. End date</li> </ol> OR Bill cycle <ol style="list-style-type: none"> <li>3. Province (optional and drop down should have option to select all province together)</li> <li>4. CSO (optional and drop down should have option to select all CSO together)</li> <li>5. User (optional and the drop down should have option to select all user together)</li> </ol>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

The user field is used where in a separate user/supervisor is extraction the report for another user, then the report should mention the user for which the report was extracted and the user who has extracted the report.

The report should have the below mentioned header format

- ST Logo
- Syrian Telecom (Static text)
- Name of the report
- CSO: <Name> - Province:< Name>
- This report has been reprinted by the Customer Service Officer <Name of the officer> on <Date>


The report shall contain the following information in output,

- a. Customer number
- b. Phone number
- c. Customer Name (First, middle and Last)
- d. Account (Open Amount per contract)
- e. Account (Open Amount per customer)
- f. Suspension date
- g. Bill cycle (If selected)
- h. Province
- i. CSO
- j. USER

The report should have below SUM items at the footer

- Total number of rows or customers present in the report.
- Total of each of the amounts e.g. Open Amount per contract, Open Amount per customer.

The solution shall generate an excel file and PDF with the output information.

 Note:

<b>ID#: BSCS-BDA-004</b>	<b>RAISED BY: -</b>
<b>UR: Instalment Report</b>	
<b>Current Flow: -</b>	
<p>This report is generated for instalment invoice, out of web-payment application. Report contains the instalment invoice details including the remaining open amount. The source information is available in billing system, which is cloned to INTERDBX database on daily basis and the information in INTERDBX is used by web-payment to generate the report.</p>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

### Detailed Requirement: -

Target solution shall provide a GUI to generate a report on invoice instalments per Province per agency, who has successfully completed or paid all the instalments and ongoing installment. The status field in the output should reflect if the instalment is “Ongoing” or “Successfully closed (All Paid)”

The GUI shall accept the following information as an input:

1. Start date
2. End date
3. Province (optional and drop down should have option to select all province together)
4. CSO (optional and drop down should have option to select all CSO together)
5. User (optional and the drop down should have option to select all user together)
6. Customer\_id

The user field is used where in a separate user/supervisor is extraction the report for another user, then the report should mention the user for which the report was extracted and the user who has extracted the report.

The report should have the below mentioned header format

- ST Logo
- Syrian Telecom (Static text)
- Name of the report
- CSO: <Name> - Province:< Name>
- This report has been reprinted by the Customer Service Officer <Name of the officer> on <Date>

The report shall contain the following information,

1. Customer\_id
2. Customer Name (First, Middle and Last)
3. instalment approval id
4. Phone\_number
5. BC/year
6. Pending amount
7. Paid amount
8. Due date for first delayed instalment
9. Number of Paid Instalment
10. Individual Instalment amount
11. Individual Instalment Status (Paid/Unpaid)
12. Instalment creation date
13. Instalment approve date
14. Instalment id
15. Instalment\_end\_date( when status is finished)


Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

- 16. Invoice ID
- 17. Number of Instalments
- 18. Province
- 19. CSO
- 20. USER

The report should have below SUM items at the footer

- Total number of rows or customers present in the report.
- Total of each of the amounts e.g. Pending amount, Paid amount.

The solution shall generate an excel file with the output information.

 *Note:*

<b>ID#: BSCS-BDA-005</b>	<b>RAISED BY: -</b>
<b>UR: Deactivated Numbers Report</b>	
<p><b>Current Flow: -</b></p> <p>In alignment with Bill cycle, this report is generated for deactivated numbers, out of web-payment application. The information is grouped based on agency, bill cycle or province. The source information is available in billing system, which is cloned to INTERDBX database on daily basis and the information in INTERDBX is used by web-payment to generate the report.</p>	
<p><b>Detailed Requirement: -</b></p> <p>Target solution shall provide a GUI to generate a report on deactivated numbers. The GUI shall accept the following information as an input:</p> <ol style="list-style-type: none"> <li>1. Start date</li> <li>2. End date</li> </ol> <p>Or</p> <p>Billcycle</p> <ol style="list-style-type: none"> <li>3. Province (optional and drop down should have option to select all province together)</li> <li>4. CSO (optional and drop down should have option to select all CSO together)</li> <li>5. User (optional and the drop down should have option to select all user together)</li> </ol> <p>The user field is used where in a separate user/supervisor is extraction the report for another user, then the report should mention the user for which the report was extracted and the user who has extracted the report.</p> <p>The report should have the below mentioned header format</p>	



Prepared (Subject resp)		No.		
Marwan Khoury		1029-FCP 132 1747		
Approved (Document resp)	Checked	Date	Rev	Reference
Ziad Hobeika		2018-07-10	D	

- ST Logo
- Syrian Telecom (Static text)
- Name of the report
- CSO: <Name> - Province:< Name>
- This report has been reprinted by the Customer Service Officer <Name of the officer> on <Date>


The report shall contain the following information in output,

1. Customer ID
2. Customer Name (First, Middle and Last)
3. Phone number
4. Customer Name
5. User name (Carried the Deactivation)
6. Deactivation date.
7. Customer Address
8. Open amount at customer level.
9. Open amount at contract level (Deactivated contract).
10. Province
11. CSO
12. USER

The report should have below SUM items at the footer

- Total number of rows or cancelled numbers in the report.
- Total of each of the amounts e.g. Open amount at customer level, Open amount at contract level (Deactivated contract)

The solution shall generate an excel file or PDF with the output information.

 Note:

<b>ID#: BSCS-BDA-006</b>	<b>RAISED BY: -</b>
<b>UR: Debt Report</b>	
<b>Current Flow: -</b>  In alignment with Bill cycle, this report is generated to have customer's debt balance, out of web-payment application. The information is grouped based on province, agency, bill cycle and customer group. The source information is available in billing system, which is cloned to INTERDBX database on daily basis and the information in INTERDBX is used by web-payment to generate the report.	
<b>Detailed Requirement: -</b>  Target solution shall provide a GUI to generate a report on customer's debt.	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

The GUI shall accept the following information as an input:

1. Start date
2. End date
3. Province (optional and drop down should have option to select all province together)
4. CSO (optional and drop down should have option to select all CSO together)
5. User (optional and the drop down should have option to select all user together)
6. Debt threshold

The user field is used where in a separate user/supervisor is extraction the report for another user, then the report should mention the user for which the report was extracted and the user who has extracted the report.

As an input, threshold amount shall be accepted and shall be optional. If provided, all customers whose debt greater than the threshold amount shall be presented in the output.

The report should have the below mentioned header format

- ST Logo
- Syrian Telecom (Static text)
- Name of the report
- CSO: <Name> - Province:< Name>


The report shall contain the following information in output,

1. Customer number
2. Customer Name (First, Middle and Last)
3. Mother Name
4. Date of Birth
5. Detailed Address
6. Phone number
7. Customer Name
8. Open debt Amount
9. Customer Address
10. Invoice amount for the contract
11. Province
12. CSO
13. USER

The report should have below SUM items at the footer

- Total number of rows or customers present in the report.
- Total of open debt amount.

The solution shall generate an excel file with the output information.

 *Note:*

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

<b>ID#: BSCS-BDA-007</b>	<b>RAISED BY: -</b>
<b>UR: Insurance Report</b>	

**Current Flow: -**

ST customer can have deposits as insurance in certain agency. The insurance deposit remains as deposit till it gets refunded to the customer, upon contract termination. this report is generated for insurance, that contains customer Name, address, phone number and deposit amount/insurance amount. The source information is available in billing system, which is cloned to INTERDBX database on daily basis and the information in INTERDBX is used by web-payment to generate the report. Report is generated in an excel file.

**Detailed Requirement: -**

Target solution shall provide a GUI to generate a report on deposit payments for customers.

The GUI shall accept the following information as an input:

1. Start date
2. End date
3. Province (optional and drop down should have option to select all province together)
4. CSO (optional and drop down should have option to select all CSO together)
5. User (optional and the drop down should have option to select all user together)

The user field is used where in a separate user/supervisor is extraction the report for another user, then the report should mention the user for which the report was extracted and the user who has extracted the report.

The report should have the below mentioned header format

- ST Logo
- Syrian Telecom (Static text)
- Name of the report
- CSO: <Name> - Province:< Name>
- This report has been reprinted by the Customer Service Officer <Name of the officer> on <Date>

The report shall contain the following information in output,

1. Customer number
2. Phone number
3. Customer name
4. Deposit amount
5. Province
6. CSO


Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

## 7. USER

The report should have below SUM items at the footer

- Total number of rows or customers present in the report.
- Total of deposit amount.

The solution shall generate an excel file or PDF with the output information.

 *Note:*

<b>ID#: BSCS-BDA-008</b>	<b>RAISED BY: -</b>
<b>UR: Credit Report</b>	

### Current Flow: -

In alignment with Bill cycle, this report is generated to deposit balance, out of web-payment application. The information is grouped based on province, agency, bill cycle. The source information is available in billing system, which is cloned to INTERDBX database on daily basis and the information in INTERDBX is used by web-payment to generate the report.

### Detailed Requirement: -

Target solution shall provide a GUI to generate a report on deposit payments for customers. The GUI shall accept the following information as an input:

1. Start date
2. End date
3. Province (optional and drop down should have option to select all province together)
4. CSO (optional and drop down should have option to select all CSO together)
5. User (optional and the drop down should have option to select all user together)

The user field is used where in a separate user/supervisor is extraction the report for another user, then the report should mention the user for which the report was extracted and the user who has extracted the report.

The report should have the below mentioned header format

- ST Logo
- Syrian Telecom (Static text)
- Name of the report
- CSO: <Name> - Province:< Name>
- This report has been reprinted by the Customer Service Officer <Name of the officer> on <Date>

The report shall contain the following information in output,


Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

1. Customer number
2. Phone number
3. Customer name
4. Advance amount
5. Current open amount (This amount represents the amount left over post adjustment)
6. Province
7. CSO
8. USER

The report should have below SUM items at the footer

- Total number of rows or customers present in the report.
- Total of each of the amounts e.g. Advance amount  
, Current open amount.

The solution shall generate an excel file or PDF with the output information.

 *Note:*

<b>ID#: BSCS-BDA-009</b>	<b>RAISED BY: -</b>
<b>UR: Insurance Refund Report</b>	
<b>Current Flow: -</b>  ST generates this report on refunded deposit amounts. The report consists of the following information: <ol style="list-style-type: none"> <li>1. Deposit Refunded amount</li> <li>2. Date of operation</li> <li>3. Customer Name</li> <li>4. Customer Id</li> <li>5. Phone number.</li> </ol> The source information is available in billing system, which is cloned to INTERDBX database on daily basis and the information in INTERDBX is used by web-payment to generate the report.	
<b>Detailed Requirement: -</b>  Target solution shall provide a GUI to generate a report on deposit refunds. The GUI shall accept the following information as an input: <ol style="list-style-type: none"> <li>1. Start date</li> <li>2. End date</li> <li>3. Province (optional and drop down should have option to select all province together)</li> <li>4. CSO (optional and drop down should have option to select all CSO together)</li> <li>5. User (optional and the drop down should have option to select all user together)</li> </ol>	

Prepared (Subject resp)		No.		
Marwan Khoury		1029-FCP 132 1747		
Approved (Document resp)	Checked	Date	Rev	Reference
Ziad Hobeika		2018-07-10	D	

The user field is used where in a separate user/supervisor is extraction the report for another user, then the report should mention the user for which the report was extracted and the user who has extracted the report.

The report should have the below mentioned header format

- ST Logo
- Syrian Telecom (Static text)
- Name of the report
- Username
- Period of report
- This report has been reprinted by the Customer Service Officer <Name of the officer> on <Date>


The report shall contain the following information in output,

1. Customer Id
2. Phone number.
3. Customer Name
4. Deposit Refunded amount
5. Date of operation
6. Province
7. CSO
8. USER

The report should have below SUM items at the footer

- Total number of rows or customers present in the report.
- Total of deposit refund amount.

The solution shall generate an excel file with the output information.

 Note:

<b>ID#: BSCS-BDA-010</b>	<b>RAISED BY: -</b>
<b>UR: Income Per Cycle Report</b>	
<b>Current Flow: -</b>  ST generates this report on collected payments for generated invoices for a bill cycle. The report is generated per agency per province. The report contains the information about the amount collected, invoice amount without late fee and tax.	
<b>Detailed Requirement: -</b>	

Prepared (Subject resp)		No.		
Marwan Khoury		1029-FCP 132 1747		
Approved (Document resp)	Checked	Date	Rev	Reference
Ziad Hobeika		2018-07-10	D	

Target solution shall provide a GUI to generate a report on bill cycle wise income with given time range, this is the amount collected for that bill cycle.

The GUI shall accept the following information as an input:

1. Start date
2. End date
3. Province (optional and drop down should have option to select all province together)
4. CSO (optional and drop down should have option to select all CSO together)
5. User (optional and the drop down should have option to select all user together)

The user field is used where in a separate user/supervisor is extraction the report for another user, then the report should mention the user for which the report was extracted and the user who has extracted the report.

The report should have the below mentioned header format

- ST Logo
- Syrian Telecom (Static text)
- Name of the report
- CSO: <Name> - Province:< Name>
- Period of the report
- This report has been reprinted by the Customer Service Officer <Name of the officer> on <Date>

With-in the given period, solution shall extract consolidated payments for invoices specific to a Bill cycle. The report shall contain the following information in the output,

1. Bill cycle identifier
2. Amount collected excluding tax
3. Amount collected as part of tax
4. Total amount collected
5. late fee collected
6. Province
7. CSO
8. USER

The report should have below SUM items at the footer

- Total amount collected per bill cycle.
- Total amount collected in BOD.

The solution shall generate an excel file with the output information.

 Note:

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

UR: Cashier Report	
<p><b>Current Flow: -</b></p> <p>Each day, this report is generated for all payment transactions collected by CSR, out of web-payment application. The information in the report is organised (grouped by) in the following order:</p> <ol style="list-style-type: none"> <li>1. payment type e.g. advance payment</li> <li>2. payment mode e.g. cash, cheque</li> <li>3. customer category e.g. official</li> <li>4. payment status e.g. committed, cancelled</li> </ol> <p>For cashier report, there exists three layouts for presentation of information as</p> <ol style="list-style-type: none"> <li>1. CSR Normal Report</li> <li>2. Payment delivery report</li> <li>3. Payment Auditing report</li> </ol>	
<p><b>Detailed Requirement: -</b></p> <p>Target solution shall provide a GUI to generate a report on payments collected by a cashier for every working day. The GUI shall accept the following information as an input,</p> <ol style="list-style-type: none"> <li>a. Start date</li> <li>b. End date</li> <li>c. Province (optional and drop down should have option to select all province together)</li> <li>d. CSO (optional and drop down should have option to select all CSO together)</li> <li>e. User (optional and the drop down should have option to select all user together)</li> </ol> <p>The solution shall group the payments by payment type (advance payment, invoice payment, item or device sale), payment mode (cash, cheque, bank Transaction, Card, Commercial, Real Estate Bank), customer category and payment status (committed, cancelled).</p> <p>The report should have the below mentioned header format</p> <ul style="list-style-type: none"> <li>➤ ST Logo</li> <li>➤ Syrian Telecom (Static text)</li> <li>➤ Name of the report</li> <li>➤ The name of the Center/CSO/Agency</li> <li>➤ Name of Cashier</li> <li>➤ Report extraction date</li> <li>➤ This report has been reprinted by the Customer Service Officer &lt;Name of the officer&gt; on &lt;Date&gt;</li> </ul> <p>The report shall contain the following information in the output,</p> <ol style="list-style-type: none"> <li>a. Payment transaction id</li> <li>b. Customer Name</li> <li>c. Customer Id</li> <li>d. Date of operation</li> </ol>	



Prepared (Subject resp)		No.		
Marwan Khoury		1029-FCP 132 1747		
Approved (Document resp)	Checked	Date	Rev	Reference
Ziad Hobeika		2018-07-10	D	

- e. Amount excluding tax
- f. Amount for tax
- g. total amount
- h. Phone number
- i. Late fee (value in case of invoice late fee)
- j. Suspension fee (value in case of any suspension fee changed)
- k. Financial stamp (value of the financial amount charged)
- l. Phone number
- m. Invoice id
- n. Bill cycle number
- o. Province
- p. CSO
- q. USER

The report should have below SUM items at the footer

- Total sum per transaction type e.g. cash, cheque, bank transaction
- Total sum per payment type e.g. invoice payment, advance payment, instalment fee payment, advance deposit payment, cash payment.
- Total sum amount of all transaction and payment type.

The solution shall generate a pdf file with the output information.

 *Note:*

<b>ID#: BSCS-BDA-012</b>	<b>RAISED BY: -</b>
<b>UR: Agency Report or Province Report</b>	
<b>Current Flow: -</b>  Each day, this report is generated for all payment transactions collected per Agency, out of web-payment application. The user role is CSO accounting head. The report contains the total payment information and based on the reported payment, corresponding amount is deposited to the bank.	
<b>Detailed Requirement: -</b>  Target solution shall provide a GUI to generate a report on payments collected by an agency (CSO) for every working day.  The GUI shall accept the following information as an input: <ol style="list-style-type: none"> <li>1. Start date</li> <li>2. End date</li> <li>3. Province (optional and drop down should have option to select all province together)</li> <li>4. CSO (optional and drop down should have option to select all CSO together)</li> </ol>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

## 5. User (optional and the drop down should have option to select all user together)

The user field is used where in a separate user/supervisor is extraction the report for another user, then the report should mention the user for which the report was extracted and the user who has extracted the report

currently this report is sort by cashiers for e.g: if there are 3 cashiers in this CSO the output of the report will be 3 tables, each table for a cashier/User and customer category.

The report should have the below mentioned header format

- ST Logo
- Syrian Telecom (Static text)
- Name of the report
- The name of the Center:
- Period of the report
- This report has been reprinted by the Customer Service Officer <Name of the officer> on <Date>
- Cashier Name
- Customer category


The report shall contain the following information in the output,

9. Payment Type GL description
10. Cash amount
11. Bank transaction
12. Cheque amount
13. Total amount
14. User/ Cashier
15. Customer Category
16. GL against which the payment was done
17. CSO
18. Payment type
19. Province
20. CSO
21. USER

The report should have below SUM items at the footer

- Total amount collected per agency/province.
- Total amount collected for all agency/province.

The solution shall generate a pdf file with the output information.

 Note:

Prepared (Subject resp)		No.		
Marwan Khoury		1029-FCP 132 1747		
Approved (Document resp)	Checked	Date	Rev	Reference
Ziad Hobeika		2018-07-10	D	

<b>ID#: BSCS-BDA-014</b>	<b>RAISED BY: -</b>
<b>UR: Write off Report</b>	
<p><b>Current Flow: -</b></p> <p>This report is generated for write off transaction and amount for a specific period, out of BSCS R1 application. The report contains the following information,</p> <ul style="list-style-type: none"> <li>- Cancelled amount</li> <li>- date of cancelation</li> <li>- reason id</li> <li>- bill cycle</li> <li>- Customer name</li> <li>- Customer Id</li> <li>- Phone number</li> <li>- customer category</li> </ul> <p>The source information is available in billing system, which is cloned to INTERDBX database on daily basis and the information in INTERDBX is used by web-payment to generate the report. Report is generated in an excel file.</p>	
<p><b>Detailed Requirement: -</b></p> <p>Target solution shall provide a GUI to generate a report on payments.</p> <p>The GUI shall accept the following information as an input:</p> <ol style="list-style-type: none"> <li>1. Start date</li> <li>2. End date</li> </ol> <p>Or</p> <p>Billcycle</p> <ol style="list-style-type: none"> <li>3. Province (optional and drop down should have option to select all province together)</li> <li>4. CSO (optional and drop down should have option to select all CSO together)</li> <li>5. User (optional and the drop down should have option to select all user together)</li> </ol> <p>The user field is used where in a separate user/supervisor is extraction the report for another user, then the report should mention the user for which the report was extracted and the user who has extracted the report.</p> <p>The report should have the below mentioned header format</p> <ul style="list-style-type: none"> <li>➤ ST Logo</li> <li>➤ Syrian Telecom (Static text)</li> <li>➤ Name of the report</li> <li>➤ Username</li> <li>➤ Period of the report</li> </ul>	

Prepared (Subject resp)		No.		
Marwan Khoury		1029-FCP 132 1747		
Approved (Document resp)	Checked	Date	Rev	Reference
Ziad Hobeika		2018-07-10	D	

- This report has been reprinted by the Customer Service Officer <Name of the officer> on <Date>


The report shall contain the following information in the output,

1. Write off amount.
2. Date the write off
3. Date of executing of write off
4. Customer Name (First, Middle and Last)
5. Customer Category
6. Telephone Number
7. Billcycle.
8. Customer id
9. Write off
10. User name who performed the write off.
11. Invoice amount
12. Province
13. CSO
14. USER

The report should have below SUM items at the footer

- Total of write off amount.

The solution shall generate an excel file and PDF with the output information.

 *Note: Refer the appendix for the report format details.*

<b>ID#: BSCS-BDA-015</b>	<b>RAISED BY: -</b>
<b>UR: Instalment Report (Automatically cancelled instalments due to 5 days delay or delay on 2 consecutive payment)</b>	
<b>Current Flow: -</b>  This report is generated for instalment invoice, out of web-payment application. Report contains the instalment invoice details including the remaining open amount. The source information is available in billing system, which is cloned to INTERDBX database on daily basis and the information in INTERDBX is used by web-payment to generate the report.	
<b>Detailed Requirement: -</b>  Target solution shall provide a GUI to generate a report on invoice instalments per Province per agency, who has successfully completed or paid all the instalments.  The GUI shall accept the following information as an input:	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

1. Start date
2. End date
3. Province (optional and drop down should have option to select all province together)
4. CSO (optional and drop down should have option to select all CSO together)
5. User (optional and the drop down should have option to select all user together)

The user field is used where in a separate user/supervisor is extraction the report for another user, then the report should mention the user for which the report was extracted and the user who has extracted the report.

The report should have the below mentioned header format

- ST Logo
- Syrian Telecom (Static text)
- Name of the report
- CSO: <Name> - Province:< Name>
- This report has been reprinted by the Customer Service Officer <Name of the officer> on <Date>


The report shall contain the following information,

1. Customer id
2. Customer Name (First, Middle and Last)
3. instalment approval id
4. Phone\_number
5. BC/year
6. Total Invoice number
7. Remaining Instalment amount
8. Paid Instalment amount
9. Instalment creation date.
10. Instalment Cancellation date
11. Cancellation reason
12. Number Of instalment
13. Invoice number.
14. Province
15. CSO
16. USER

The report should have below SUM items at the footer

- Total number of rows or customers present in the report.
- Total of each of the amounts e.g. Pending amount, Paid amount.

The solution shall generate an excel file with the output information.

 *Note: Refer the appendix for the report format details*

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

<b>ID#: BSCS-BDA-016</b>	<b>RAISED BY: -</b>
<b>UR: Instalment Report (Manually cancelled instalments)</b>	

### Current Flow: -

This report is generated for instalment invoice, out of web-payment application. Report contains the instalment invoice details including the remaining open amount. The source information is available in billing system, which is cloned to INTERDBX database on daily basis and the information in INTERDBX is used by web-payment to generate the report.

### Detailed Requirement: -

Target solution shall provide a GUI to generate a report on invoice instalments per Province per agency, who has successfully completed or paid all the instalments.

The GUI shall accept the following information as an input:

1. Start date
2. End date
3. Province (optional and drop down should have option to select all province together)
4. CSO (optional and drop down should have option to select all CSO together)
5. User (optional and the drop down should have option to select all user together)

The user field is used where in a separate user/supervisor is extraction the report for another user, then the report should mention the user for which the report was extracted and the user who has extracted the report.

The report should have the below mentioned header format

- ST Logo
- Syrian Telecom (Static text)
- Name of the report
- CSO: <Name> - Province:< Name>
- This report has been reprinted by the Customer Service Officer <Name of the officer> on <Date>

The report shall contain the following information,

1. Customer id
2. Customer Name (First, Middle and Last)
3. instalment approval id
4. Phone\_number
5. BC/year
6. Total Invoice number
7. Remaining Instalment amount


Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

8. Paid Instalment amount
9. Instalment creation date.
10. Instalment Cancellation date
11. Cancellation reason
12. Number Of instalment
13. Province
14. CSO
15. USER

The report should have below SUM items at the footer

- Total number of rows or customers present in the report.
- Total of each of the amounts e.g. Pending amount, Paid amount

The solution shall generate an excel file with the output information.

 *Note: Refer the appendix for the report format details*

<b>ID#: BSCS-BDA-017</b>	<b>RAISED BY: -</b>
<b>UR: Total Debt Report</b>	
<p><b>Current Flow: -</b></p> <p>In alignment with Bill cycle, this report is generated to have customer's debt balance, out of web-payment application. The information is grouped based on province, agency, bill cycle and customer group. The source information is available in billing system, which is cloned to INTERDBX database on daily basis and the information in INTERDBX is used by web-payment to generate the report.</p>	
<p><b>Detailed Requirement: -</b></p> <p>Target solution shall provide a GUI to generate a report on customer's debt based on customer category.</p> <p>The GUI shall accept the following information as an input:</p> <ol style="list-style-type: none"> <li>1. Start date</li> <li>2. End date</li> <li>3. Province (optional and drop down should have option to select all province together)</li> <li>4. CSO (optional and drop down should have option to select all CSO together)</li> <li>5. User (optional and the drop down should have option to select all user together)</li> <li>6. Debt threshold</li> </ol> <p>The user field is used where in a separate user/supervisor is extraction the report for another user, then the report should mention the user for which the report was extracted and the user who has extracted the report.</p>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

As an input, threshold amount shall be accepted and shall be optional. If provided, all customers whose debt greater than the threshold amount shall be presented in the output.

The report should have the below mentioned header format

- ST Logo
- Syrian Telecom (Static text)
- Name of the report
- CSO: <Name> - Province:< Name>
- This report has been reprinted by the Customer Service Officer <Name of the officer> on <Date>


The report shall contain the following information in output,

1. Bill cycle number
2. Customer Category
3. Total debt
4. Remaining debt
5. VAT on the remaining debt
6. Province
7. CSO
8. USER

The report should have below SUM items at the footer

- Total of debt amount.
- Total of remaining debt amount.

The solution shall generate an excel file with the output information.

 *Note: Refer the appendix for the report format details*

<b>ID#: BSCS-BDA-018</b>	<b>RAISED BY: -</b>
<b>UR: Auditing Report</b>	
<b>Current Flow: -</b>  This report is generated for all payment transactions collected per customer category per GL on a specific day, out of web-payment application. The user role is CSO accounting head. The report contains the total payment information GL wise for every customer category and the sum of amount collected for every GL.	
<b>Detailed Requirement: -</b>	



Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

Target solution shall provide a GUI to generate a report on payments collected by all cashier for a GL account with respect to customer category.

The GUI shall accept the following information as an input:

1. Start date or Payment date
3. Province (optional and drop down should have option to select all province together)
4. CSO (optional and drop down should have option to select all CSO together)
5. User (optional and the drop down should have option to select all user together)

The user field is used where in a separate user/supervisor is extraction the report for another user, then the report should mention the user for which the report was extracted and the user who has extracted the report

Currently this report displays the amount collected by all the cashiers per customer category and per GL. The report also sums up total amount collected per GL for all the customer category. Based on the number of customer category there can be multiple rows in the report output.

The report should have the below mentioned header format

- ST Logo
- Syrian Telecom (Static text)
- Name of the report
- The name of the Center:
- Period of the report
- This report has been reprinted by the Customer Service Officer <Name of the officer> on <Date>


The report shall contain the following information in the output,

1. GL Code
2. Payment Type GL description
3. Amount per GL
4. Payment Date as per input provided
5. Customer category
6. Province
7. CSO
8. USER

The report should have below SUM items at the footer

9. Total amount collected for all customer category per GL.

The solution shall generate a pdf file with the output information.

 Note:

Prepared (Subject resp)		No.		
Marwan Khoury		1029-FCP 132 1747		
Approved (Document resp)	Checked	Date	Rev	Reference
Ziad Hobeika		2018-07-10	D	

<b>ID#: BSCS-BDA-019</b>	<b>RAISED BY: -</b>
<b>UR: Income report of province from customer or contract of other provinces</b>	

**Current Flow: -**

This report is generated for a province and it includes payments made within specified period by customers of other provinces. The user role is Province and the report is extracted by providing input province name e.g. Damascus and output includes payment data of rest of the 13 provinces whose customer moved to Damascus and made payment.

**Detailed Requirement: -**

Target solution shall provide a GUI to generate a report per province within specified period.

The GUI shall accept the following information as an input:

1. Start date
2. End date
3. Province (Mandatory)
4. CSO (optional and drop down should have option to select all CSO together)
5. User (optional and the drop down should have option to select all user together)

The user field is used where in a separate user/supervisor is extraction the report for another user, then the report should mention the user for which the report was extracted and the user who has extracted the report.

The report should have the below mentioned header format

- ST Logo
- Syrian Telecom (Static text)
- Name of the report
- Province:< Name>
- Report period
- This report has been printed by the Customer Service Officer <Name of the officer> on <Date>
- Total collection of <Name of the input Province for which report is extracted>
- Payments for the province of <Name of the province whose customer moved and made payment in input province>

The report shall contain the following information,


1. GL Code
2. GL Name/ Description
3. Cash payment
4. Cheque payment
5. Bank transaction
6. Total (Cash+ Cheque+ Bank Transaction)

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

The report should have below SUM items at the footer

- Sum of cash payments collected under all GL of a province
- Sum of cheque payments collected under all GL of a province
- Sum of bank transaction collected under all GL of a province
- Sum of total payment collected (Cash+ Cheque+ Bank transaction) under all GL of a province

The solution shall generate a PDF file with the output information.

 *Note: Refer the appendix for the report format details*

## 2.2 Architectural Block EMM

### 2.2.1 Usage Collection

This section consists the current business logic for usage collection along with the new requirement in the target if any.

Usage Collection and Mediation function collects and normalizes resource consumption data from the resource usage gateways and generates service usage records. Usage may be form different resource types, and the usage collection and mediation component adjust these inputs to conform to the downstream applications.

In Syrian Telecom CCBS project, Ericsson Multi Mediation is fulfilling the usage collection function, replacing the existing CDRAC solution.

The collection is done from different sources:

- Ericsson Switches
- Samsung Switches
- Siemens Switches
- Huawei IMS ATS
- Huawei AAA

The distribution is done towards BSCS.

The usage collection requirements are distributed in the below chapters as per the collection flow, with a general section on the top.

#### 2.2.1.1 Network Billing Usage Collection & Mediation

##### 2.2.1.1.1 Collection

<b>ID#: EMM-USC-001</b>	<b>Raised By:</b>
<b>UR: Ericsson Switches CDRs Collection</b>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

### Current Flow:

Ericsson exchange switches are handling voice calls within the same province as well as national and international calls.

Ericsson switches are generating UMRs (Usage Metering Record) for local calls and CDRs (Call Data Record) for other national and international calls.

The Existing Ericsson Mediation is transferring the UMRs and CDRs through FTAM from Ericsson OMC each 10 day and storing them. CDRAC is collecting them using SCP from the existing EMM.

Ericsson File Name Format is [xxxxyyyy] where:

- xxxx: is the Ericsson Switch Id (ex: H0H1)
- yyyy: is a sequential file number (ex: 0616)

### Detailed Requirement:

Ericsson switches will replace UMRs generation by normal CDRs, consequently, local calls as well as national and international will generate a CDR record when applicable.

The target system shall collect the CDRs generated by Ericsson switches for all voice calls (local, national and international).

The existing Ericsson Mediation will keep transferring the CDRs through FTAM and storing them. The new Ericsson Mediation will collect the CDRs using FTP from the existing EMM.

The expected Ericsson Input Filename Format for the generated CDRs will be [xxxxyyyy] where:

- xxxx: is the Ericsson Switch Id (ex: H0H1)
- yyyy: is a sequential file number (ex: 0616)

 Note:

<b>ID#: EMM-USC-002</b>	<b>Raised By:</b>
<b>UR: Siemens Switches CDRs Collection</b>	
<b>Current Flow:</b> <p>Siemens exchange switches are handling local voice calls (Calls within the same switch), as well as national and international calls.</p> <p>Siemens switches are generating UMRs (Usage Metering Record) for local calls and CDRs (Call Data Record) for other national and international calls.</p>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

The generated UMRs/CDRs are stored on Siemens Net Manager server, then the scripts on Rating server in CCBS will pull (FTP) them toward the CDRAC input directory.

Siemens UMR File Name Format is [xxxx\_DD-MM-YYYY\_hh-mm-ss.MET\_V12] where:

- xxxx: is the Siemens Switch Id (ex: DAW1)
- DD: is the day of the month
- MM: is the month of the year
- YYYY: is the year
- hh: is the hour
- mm: is the minute
- ss: is the second
- MET: corresponds for Metering

Siemens CDR File Name Format is [xxxx\_DD-MM-YYYY\_hh-mm-ss.AMA\_V17] where:

- xxxx: is the Siemens Switch Id (ex: DAW1)
- DD: is the day of the month
- MM: is the month of the year
- YYYY: is the year
- hh: is the hour
- mm: is the minute
- ss: is the second
- AMA: corresponds for AMA CDR

### **Detailed Requirement:**

Siemens switches will replace UMRs generation by normal CDRs, consequently, local calls as well as national and international will generate a CDR record when applicable.

The target system shall collect the CDRs generated by Siemens switches for all voice calls (local, national and international).

The new Ericsson Mediation will collect the CDRs using FTP from Siemens Net Manager Server.

The expected Siemens Input Filename Format for the generated CDRs shall be [xxxx\_DD-MM-YYYY\_hh-mm-ss.AMA\_V17] where:

- xxxx: is the Siemens Switch Id (ex: DAW1)
- DD: is the day of the month
- MM: is the month of the year
- YYYY: is the year
- hh: is the hour
- mm: is the minute
- ss: is the second
- AMA: corresponds for AMA CDR

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

*Note: UMRs will be replaced with CDR generation then only CDRs will be collected from Siemens Net Manager server.*

<b>ID#: EMM-USC-003</b>	<b>Raised By:</b>
<b>UR: Samsung Switches UMRs Collection</b>	

#### Current Flow:

Samsung exchange switches are handling local voice calls (Calls within the same switch), as well as national and international calls.

Samsung switches are generating UMRs (Usage Metering Record) for local calls but are not able to generate CDRs (Call Data Record) for the other national and international calls. Therefore, their national and international calls are directed to Siemens Switches and the correspondent CDRs are generated by Siemens Switches.

Samsung UMRs are manually transferred to CDRAC team. CDRAC team use Norton Commander Tool “convmod command” to convert Samsung UMRs to a readable ISO format and then they FTP the files to CDRAC input folder.

Samsung UMR File Name Format after convmod conversion is:

[xxxx\_DD-MM-YYYY\_hh-mm-ss.MET\_SAM] where:

xxxx: is the Samsung Switch Id (ex: HOAB)

DD: is the day of the month

MM: is the month of the year

YYYY: is the year

hh: is the hour

mm: is the minute

ss: is the second

MET: corresponds for Metering

SAM: SAMSUNG

Example: HOAB\_30-04-2017\_00-00-00.MET\_SAM

#### Detailed Requirement:

The target system shall process the Samsung UMRs as decoded by Norton Commander Tool “convmod command”.

The decoded UMRs will be FTPed to the new Mediation servers, by the CDRAC team, for processing.


The expected Samsung Input Filename Format for the generated UMR after convmod conversion shall be [xxxx\_DD-MM-YYYY\_hh-mm-ss.MET\_SAM] where:


xxxx: is the Samsung Switch Id (ex: HOAB)

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

DD: is the day of the month  
MM: is the month of the year  
YYYY: is the year  
hh: is the hour  
mm: is the minute  
MET: corresponds for Metering  
SAM: SAMSUNG

Example: HOAB\_30-04-2017\_00-00-00.MET\_SAM

 *Note: Due to the limitations on Samsung Switches, it is not possible to generate CDRs instead of UMRs.*

<b>ID#: EMM-USC-004</b>	<b>Raised By:</b>
<b>UR: Huawei ATS CDRs Collection</b>	
<b>Current Flow:</b>  The initial plan of ST was to convert, using temporary isolv mediation, the original IMS CDRs to an output identical to Ericson CDRs to be processed by CDRAC/BSCS. Isolv also extracts needed data to generate UMRs (Usage Metering Records) from local CDRs based on ST request.	
<b>Detailed Requirement:</b>  The target system shall collect CDRs from ATS Huawei node as generated by ATS without any intervention from Isolv mediation. FTP will be used as the collection interface. The expected ATS Input Filename Format for the generated CDRs shall be b[aaaaaaaa].dat where: aaaaaaaa: is an 8-digit sequence number  Example: b00000001.dat	
 <i>Note:</i>	

<b>ID#: EMM-USC-005</b>	<b>Raised By:</b>
<b>UR: Huawei AAA CDRs Collection</b>	
<b>Current Flow:</b>  N/A	


Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference


**Detailed Requirement:**

The target system shall collect CDRs from Huawei AAA  
FTP will be used as the collection interface.

The expected AAA Input Filename Format for the generated CDRs shall be  
{CDR prefix}+{.}+{YYYYMMDD}+{.}+{node ID}+{.}+{sequence number}+{CDR file name extension}

Example: fbbwifisum\_loc.20111018.601.001128.unl

 Note:

<b>ID#: EMM-USC-006</b>	<b>Raised By:</b>
<b>UR: ZTE IN Usage CDRs Collection</b>	
<b>Current Flow:</b> <p>ZTE core exchange in Damascus headquarter generates a CDR file for each service every 15 minutes, currently there are only 200 subscribers on all services so there is no load or traffic.</p> <p>There is a dedicated server where the content of the generated CDR is extracted and inserted into the IN database (SYBASE). Since CDRAC cannot read the CDR generated by the IN exchange, ST IN team extracts the needed data by CCBS from the IN SYBASE database and store it on text files according to the service type</p>	
<b>Detailed Requirement:</b> <p>The target system shall collect CDRs from ZTE IN. FTP will be used as the collection interface.</p> <p>CDRs received from ZTE IN will be pre-rated. In each CDR, EMM shall consider the fields "fee" to calculate the rating for that CDR.</p> <p>The expected ZTE IN Input Filename Format for the generated CDRs shall be [prefix]_[network category]_[service key]_[serial number]_[date].[postfix]</p> <p>Example: in01_P_30_000001_20050101.r</p>	
 Note:	

<b>ID#: EMM-USC-048</b>	<b>Raised By:</b>
<b>UR: IN FPH Monthly Fees CDRs Collection</b>	



Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

**Current Flow:**

ZTE core exchange in Damascus headquarter generates a CDR file for each service every 15 minutes, currently there are only 200 subscribers on all services so there is no load or traffic.

There is a dedicated server where the content of the generated CDR is extracted and inserted into the IN database (SYBASE).


Since CDRAC cannot read the CDR generated by the IN exchange, ST IN team extracts the needed data by CCBS from the IN SYBASE database and store it on text files according to the service type

**Detailed Requirement:**

Monthly charges for the IN FPH service will be pushed using FTP to the target system  
The target system shall collect the IN FPH monthly charges CDRs from its local disk.

The expected IN FPH monthly fees CDRs will be in the following format  
[LAC].csv

Example: 011.csv


 Note:

<b>ID#: EMM-USC-049</b>	<b>Raised By:</b>
<b>UR: IN UAN Monthly Fees CDRs Collection</b>	
<b>Current Flow:</b> <p>ZTE core exchange in Damascus headquarter generates a CDR file for each service every 15 minutes, currently there are only 200 subscribers on all services so there is no load or traffic.</p> <p>There is a dedicated server where the content of the generated CDR is extracted and inserted into the IN database (SYBASE).</p> <p>Since CDRAC cannot read the CDR generated by the IN exchange, ST IN team extracts the needed data by CCBS from the IN SYBASE database and store it on text files according to the service type</p>	
<b>Detailed Requirement:</b> <p>Monthly charges for the IN UAN service will be pushed using FTP to the target system The target system shall collect the IN UAN monthly charges CDRs from its local disk.</p> <p>The expected IN UAN monthly fees CDRs will be in the following format [LAC].csv</p>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

Example: 011.csv

 Note:

<b>ID#: EMM-USC-050</b>	<b>Raised By:</b>
<b>UR: IN VPN Monthly Fees CDRs Collection</b>	
<p><b>Current Flow:</b></p> <p>ZTE core exchange in Damascus headquarter generates a CDR file for each service every 15 minutes, currently there are only 200 subscribers on all services so there is no load or traffic.</p> <p>There is a dedicated server where the content of the generated CDR is extracted and inserted into the IN database (SYBASE). Since CDRAC cannot read the CDR generated by the IN exchange, ST IN team extracts the needed data by CCBS from the IN SYBASE database and store it on text files according to the service type</p>	
<p><b>Detailed Requirement:</b></p> <p>Monthly charges for the IN VPN service will be pushed using FTP to the target system The target system shall collect the IN VPN monthly charges CDRs from its local disk.</p> <p>The expected IN VPN monthly fees CDRs will be in the following format [LAC].csv</p> <p>Example: 011.csv</p>	
<p> Note:</p>	

<b>ID#: EMM-USC-051</b>	<b>Raised By:</b>
<b>UR: IN PNS Monthly Fees CDRs Collection</b>	
<p><b>Current Flow:</b></p> <p>ZTE core exchange in Damascus headquarter generates a CDR file for each service every 15 minutes, currently there are only 200 subscribers on all services so there is no load or traffic.</p> <p>There is a dedicated server where the content of the generated CDR is extracted and inserted into the IN database (SYBASE). Since CDRAC cannot read the CDR generated by the IN exchange, ST IN team extracts the needed data by CCBS from the IN SYBASE database and store it on text files according to the service type</p>	


Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference


**Detailed Requirement:**

Monthly charges for the IN PNS service will be pushed using FTP to the target system  
The target system shall collect the IN PNS monthly charges CDRs from its local disk.

The expected IN PNS monthly fees CDRs will be in the following format  
[LAC].csv

Example: 011.csv

 Note:

<b>ID#: EMM-USC-052</b>	<b>Raised By:</b>
<b>UR: Real IP Monthly Fees CDRs Collection</b>	
<b>Current Flow:</b>  ZTE core exchange in Damascus headquarter generates a CDR file for each service every 15 minutes, currently there are only 200 subscribers on all services so there is no load or traffic.  There is a dedicated server where the content of the generated CDR is extracted and inserted into the IN database (SYBASE). Since CDRAC cannot read the CDR generated by the IN exchange, ST IN team extracts the needed data by CCBS from the IN SYBASE database and store it on text files according to the service type	
<b>Detailed Requirement:</b>  Monthly charges for the Real IP service will be pushed using FTP to the target system The target system shall collect the Real IP monthly charges CDRs from its local disk.  The expected Real IP monthly fees CDRs will be in the following format [LAC].csv  Example: 011.csv	
 Note:	

<b>ID#: EMM-USC-053</b>	<b>Raised By:</b>
<b>UR: Telegram Monthly Fees CDRs Collection</b>	
<b>Current Flow:</b>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

ZTE core exchange in Damascus headquarter generates a CDR file for each service every 15 minutes, currently there are only 200 subscribers on all services so there is no load or traffic.

There is a dedicated server where the content of the generated CDR is extracted and inserted into the IN database (SYBASE).

Since CDRAC cannot read the CDR generated by the IN exchange, ST IN team extracts the needed data by CCBS from the IN SYBASE database and store it on text files according to the service type

#### Detailed Requirement:

Monthly charges for the Telegram service will be pushed using FTP to the target system  
The target system shall collect the Telegram monthly charges CDRs from its local disk.

The expected Telegram monthly fees CDRs will be in the following format  
[LAC].csv


Example: 011.csv

 Note:

<b>ID#: EMM-USC-054</b>	<b>Raised By:</b>
<b>UR: Hosting Monthly Fees CDRs Collection</b>	
<b>Current Flow:</b> <p>ZTE core exchange in Damascus headquarter generates a CDR file for each service every 15 minutes, currently there are only 200 subscribers on all services so there is no load or traffic.</p> <p>There is a dedicated server where the content of the generated CDR is extracted and inserted into the IN database (SYBASE).</p> <p>Since CDRAC cannot read the CDR generated by the IN exchange, ST IN team extracts the needed data by CCBS from the IN SYBASE database and store it on text files according to the service type</p>	
<b>Detailed Requirement:</b> <p>Monthly charges for the Hosting service will be pushed using FTP to the target system The target system shall collect the Hosting monthly charges CDRs from its local disk.</p> <p>The expected Hosting monthly fees CDRs will be in the following format [LAC].csv</p> <p>Example: 011.csv</p>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference


 *Note:*


<b>ID#: EMM-USC-007</b>	<b>Raised By:</b>
<b>UR: Ericsson Switches CDRs Decoding</b>	
<p><b>Current Flow:</b></p> <p>CDRAC is currently decoding Ericsson exchange UMRs (Usage Data Records) and CDRs (Call Data Records).</p> <p>Ericsson UMRs/CDRs are ASN.1 ISO encoded files, where each file contains 1000 blocks of 2048 chars each. NULL character is used as a filler.</p> <p>The Data structure is described in Reference 6.</p>	
<p><b>Detailed Requirement:</b></p> <p>Ericsson CDRs are ASN.1 ISO encoded files, where each file contains 1000 blocks of 2048 chars each. NULL character is used as a filler.</p> <p>The Data structure is described in Reference 6.</p> <p>The target system shall decode Ericsson exchange CDRs.</p> <p>Ericsson CDRs should cover local, national and international calls, and no UMRs will be expected.</p>	
<p> <i>Note:</i></p>	

<b>ID#: EMM-USC-008</b>	<b>Raised By:</b>
<b>UR: Siemens Switches CDRs Decoding</b>	
<p><b>Current Flow:</b></p> <p>Siemens CDRs are encoded as AMA (Automatic Message Accounting) binary files.</p> <p>CDRs are generated for national and international calls.</p> <p>CDRAC is currently decoding CDRs to process them and apply the needed formatting.</p>	
<p><b>Detailed Requirement:</b></p> <p>The target system shall decode Siemens CDRs from AMA (Automatic Message Accounting) V17 binary format to a readable format for further processing. Block size to be considered as 2Kbytes.</p> <p>Data Structure is included in Reference 9.</p>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

 Note:

<b>ID#: EMM-USC-010</b>	<b>Raised By:</b>
<b>UR: Samsung Switches MRRs Decoding</b>	
<b>Current Flow:</b>  Norton Commander is currently converting the original Samsung UMRs (Usage Metering Records) from binary to ASN.1 ISO readable format.  CDRAC is decoding the ISO files and processing them.  The Data structure of the UMRs, in ASN.1 ISO format, is described in Reference 7.	
<b>Detailed Requirement:</b>  The target system shall decode Samsung exchange ASN.1 UMRs, after being converted by CDRAC team using Norton Commander Tool.  These UMRs have an encoding that is described in Reference 7.	
 Note:	

<b>ID#: EMM-USC-011</b>	<b>Raised By:</b>
<b>UR: Huawei ATS CDRs Decoding</b>	
<b>Current Flow:</b>  Huawei ATS CDRs are encoded as ASN.1 BER files.  CDRAC is currently decoding ATS CDRs to process them and apply the needed formatting.	
<b>Detailed Requirement:</b>  The target system shall decode Huawei ATS CDRs ASN.1 BER format for further processing. Data Structure is included in Reference 10.	
 Note:	

<b>ID#: EMM-USC-012</b>	<b>Raised By:</b>
<b>UR: Huawei AAA CDRs Decoding</b>	
<b>Current Flow:</b>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

**CDR File Name Format:**

{CDR prefix}+{.}+{YYYYMMDD}+{.}+{SEE node ID}+{.}+{sequence number}+{CDR file name extension}

Example of a fbbwifi\_loc CDR file name:


**fbbwifi\_loc.20111018.601.001128.unl**

Data structure available in Reference 11

**Detailed Requirement:**


The target system shall decode Huawei AAA CDRs PSV format for further processing. Data Structure is included in Reference 11.


 *Note:*


<b>ID#: EMM-USC-013</b>	<b>Raised By:</b>
<b>UR: ZTE IN Usage CDRs Decoding</b>	
<b>Current Flow:</b>  CDRs are currently coming in text format, pipe separated as per the CDR description and include a header.	
<b>Detailed Requirement:</b>  Target system will decode CDRs as per the structure described in Reference 12	
 <i>Note:</i>	

<b>ID#: EMM-USC-041</b>	<b>Raised By:</b>
<b>UR: IN FPH Monthly Fees CDRs Decoding</b>	
<b>Current Flow:</b>  Monthly fees are sent to CDRAC from each switch in an Excel file. CDRAC merges them into one entry and append them to the Invoices file created from the Usage CDRs sent from each switch. The file is sent to billing system where it is posted as usage against the telephony service	
<b>Detailed Requirement:</b>  Target system will receive the monthly fees from each switch in a CSV file. The files will be decoded according to the following structure  [phone number], [fee for one month* extention .no], [number of months]	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference


 Note:


<b>ID#: EMM-USC-042</b>	<b>Raised By:</b>
<b>UR: IN UAN Monthly Fees CDRs Decoding</b>	
<b>Current Flow:</b>  Monthly fees are sent to CDRAC from each switch in an Excel file. CDRAC merges them into one entry and append them to the Invoices file created from the Usage CDRs sent from each switch. The file is sent to billing system where it is posted as usage against the telephony service	
<b>Detailed Requirement:</b>  Target system will receive the monthly fees from each switch in a CSV file. The files will be decoded according to the following structure  [phone number], [fee for one month* extention .no], [number of months]	
 Note:	

<b>ID#: EMM-USC-043</b>	<b>Raised By:</b>
<b>UR: IN VPN Monthly Fees CDRs Decoding</b>	
<b>Current Flow:</b>  Monthly fees are sent to CDRAC from each switch in an Excel file. CDRAC merges them into one entry and append them to the Invoices file created from the Usage CDRs sent from each switch. The file is sent to billing system where it is posted as usage against the telephony service	
<b>Detailed Requirement:</b>  Target system will receive the monthly fees from each switch in a CSV file. The files will be decoded according to the following structure  [phone number], [fee for one month* extention .no], [number of months]	
 Note:	



Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

<b>ID#: EMM-USC-044</b>	<b>Raised By:</b>
<b>UR: IN PNS Monthly Fees CDRs Decoding</b>	
<b>Current Flow:</b>  Monthly fees are sent to CDRAC from each switch in an Excel file. CDRAC merges them into one entry and append them to the Invoices file created from the Usage CDRs sent from each switch. The file is sent to billing system where it is posted as usage against the telephony service	
<b>Detailed Requirement:</b>  Target system will receive the monthly fees from each switch in a CSV file. The files will be decoded according to the following structure  [phone number], [fees]	
 <i>Note:</i>	

<b>ID#: EMM-USC-045</b>	<b>Raised By:</b>
<b>UR: Real IP Monthly Fees CDRs Decoding</b>	
<b>Current Flow:</b>  Monthly fees are sent to CDRAC from each switch in an Excel file. CDRAC merges them into one entry and append them to the Invoices file created from the Usage CDRs sent from each switch. The file is sent to billing system where it is posted as usage against the telephony service	
<b>Detailed Requirement:</b>  Target system will receive the monthly fees in a CSV file. The files will be decoded according to the following structure  [phone number], [fees]	
 <i>Note:</i>	

<b>ID#: EMM-USC-046</b>	<b>Raised By:</b>
<b>UR: Telegram Monthly Fees CDRs Decoding</b>	
<b>Current Flow:</b>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference


Monthly fees are sent to CDRAC from each switch in an Excel file. CDRAC merges them into one entry and append them to the Invoices file created from the Usage CDRs sent from each switch. The file is sent to billing system where it is posted as usage against the telephony service

**Detailed Requirement:**

Target system will receive the monthly fees in a CSV file. The files will be decoded according to the following structure

[phone number], [fees]

 Note:

<b>ID#: EMM-USC-047</b>	<b>Raised By:</b>
<b>UR: Hosting Monthly Fees CDRs Decoding</b>	
<b>Current Flow:</b>  Monthly fees are sent to CDRAC from each switch in an Excel file. CDRAC merges them into one entry and append them to the Invoices file created from the Usage CDRs sent from each switch. The file is sent to billing system where it is posted as usage against the telephony service	
<b>Detailed Requirement:</b>  Target system will receive the monthly fees in a CSV file. The files will be decoded according to the following structure  [phone number], [fees]	
 Note:	


## 2.2.1.1.2 Transformation


<b>ID#: EMM-USC-014</b>	<b>Raised By:</b>
<b>UR: CDR File Duplicate Detection</b>	
<b>Current Flow:</b>  CDRAC rejects the file if filename is duplicated.	


Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

**Detailed Requirement:**

The target system shall apply Duplicate Detection logic on the collected files collected files and reject the ones who have duplicate filenames.

 Note:

<b>ID#: EMM-USC-015</b>	<b>Raised By:</b>
<b>UR: CDR Records Duplicate Detection from Switches</b>	
<b>Current Flow:</b>  Duplicate CDRs are being rejected	
<b>Detailed Requirement:</b>  The target system shall apply Duplicate Detection logic on CDRs collected from all switches and reject the ones that are duplicated.	
 Note:	

<b>ID#: EMM-USC-016</b>	<b>Raised by: -</b>
<b>UR: UMR Records Filtering</b>	
<b>Current Flow:</b>  N/A	
<b>Detailed Requirement:</b>  The target system shall filter Samsung UMR records where record type is different than 01 All filtered UMRs should be placed to a pre-defined directory.	
 Note:	

<b>ID#: EMM-USC-017</b>	<b>Raised by: -</b>
<b>UR: CDR Records Filtering</b>	
<b>Current Flow:</b>  N/A	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

### Detailed Requirement:


The target system should filter the records where:

- DURATION equal 0. This will be the first filter applied
- The CDR is not of type Placements and A\_NUMBER is without LAC defined in EMM
- The CDR is not of type Placements and B\_NUMBER is without LAC defined in EMM
- A\_NUMBER and B\_NUMBER does not have LAC
- B\_NUMBER is an international number but less than 8 digits
- Normalized B\_NUMBER is a national number but less than 5 digits
- CATEGORY is invalid. ST will not take any further action on those filtered CDR
- CHARGE\_STATUS different than 1. ST will not take any further action on those filtered CDR
- Call records with damaged CDR structure

In case of Switches, the Switch code will be read from the filename and each Switch code is mapped to defined LACs. If the A-Number LAC is not part of any LAC mapped to the Switch code, the CDR will be filtered out.


In case of ATS, the LAC will be read directly from the List-Of-Calling-Party-Address and compared against all the LACs defined in EMM.

 Note:

<b>ID#: EMM-USC-019</b>	<b>Raised by: -</b>
<b>UR: CDR File Filtering from Switches</b>	
<b>Current Flow:</b>  CDRAC application performs filter actions on incoming CDR files from switches.	
<b>Detailed Requirement:</b>  The target system should filter CDR files with incorrect naming pattern from switches. Such files should be rejected and located in a pre-defined location in file system. The system should allow manual investigation of such cases and reprocessing of those CDR files after manual correction of their names.	
 Note:	

<b>ID#: EMM-USC-020</b>	<b>Raised By:</b>
-------------------------	-------------------

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

<b>UR: Ericsson CDRs Records Filtering</b>	
<p><b>Current Flow:</b></p> <p>Ericsson CDRs have different record types used:</p> <ul style="list-style-type: none"> <li>- NE = Effective PSTN calls (00)</li> <li>- NI = Ineffective PSTN calls (01)</li> <li>- CDE = Call diversion effective (04)</li> <li>- CDI = Call diversion ineffective (05)</li> <li>- SP = Subscriber procedure (06)</li> <li>- NC = Non-call related service (07)</li> <li>- SSC = Subscriber service command (08)</li> <li>- NEIE = Effective ISDN-E calls (09)</li> <li>- NIIE = Ineffective ISDN-E calls (A)</li> </ul> <p>CDRAC is currently processing MO records that belong to “NE” and “NEIE” types.</p>	
<p><b>Detailed Requirement:</b></p> <p>Ericsson CDRs have different record types used:</p> <ul style="list-style-type: none"> <li>- NE = Effective PSTN calls (00)</li> <li>- NI = Ineffective PSTN calls (01)</li> <li>- CDE = Call diversion effective (04)</li> <li>- CDI = Call diversion ineffective (05)</li> <li>- SP = Subscriber procedure (06)</li> <li>- NC = Non-call related service (07)</li> <li>- SSC = Subscriber service command (08)</li> <li>- NEIE = Effective ISDN-E calls (09)</li> <li>- NIIE = Ineffective ISDN-E calls (A)</li> </ul> <p>The target system shall only process the records with record types equal to “00” and “09”, from the collected Ericsson records, and ignore all other records with different record types.</p>	
<p> <i>Note:</i></p>	

<b>ID#: EMM-USC-021</b>	<b>Raised By:</b>
<b>UR: Siemens Switches CDRs Records Filtering</b>	
<p><b>Current Flow:</b></p> <p>Siemens CDR files are currently filtered by CDRAC.</p>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

**Detailed Requirement:**

The target system shall only process the AMA records (where record identifier is 84H) from the collected Siemens AMA (Automatic Message Accounting) CDR file.

 *Note:*

<b>ID#: EMM-USC-023</b>	<b>Raised By:</b>
<b>UR: Samsung Switches UMRs Big Meter Filtering</b>	

**Current Flow:**

Big meter value means that old value is larger than new value. This negative difference between new and old could be:

- Normal due to counter reset (counter maximum value is 65535)
- Erroneous due to file corruption from the switch.

Before running the CDRAC module, ST check the file manually and if a lot of big meter values are detected, then they do not pass the file to CDRAC, instead they contact the switch team and report the case. Switch team should send a new file with corrected values.

If not many big values are detected, then the files are passed to CDRAC.

After CDRAC processes the files, ST team run the 'gg' script to detect if there are big meter value cases that were not detected manually before CDRAC. If the gg script detects such cases, ST will deal with each case separately.

ST Team will check if the case is related to high number of calls like enterprise customers (Bemo Bank for example), or if it is related to a suspicious case for normal subscriber, or a normal case.

ST team will then decide which records to be sent to BSCS for billing purposes and which ones to filter out for more investigations.


**Detailed Requirement:**


The target system shall filter out the records with Big Meter Values (where the difference between new and old value is negative) as described below:


1. If the number of these records is higher than 50% of the total number of the records in the file, then EMM will reject the whole file and ST Team will check it manually with the switch team. The switch team can send a new file which will follow the same collection flow.
2. In case the number of the filtered records is less than 50% of the total number of the records in the file, then EMM will store the filtered file in order to be checked manually by ST Team, and will process the remaining records that do not have this problem. ST Team will look at the filtered records and decide which ones to process and which ones to remove. The records that need to be processed again should be collected again by

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

EMM without following the restrictions mentioned in point 1 and applying the formula (current value + 65536-old value) when the current value smaller than the older value.

 Note:

<b>ID#: EMM-USC-024</b>	<b>Raised By:</b>
<b>UR: ZTE IN CDRs Filtering</b>	
<b>Current Flow:</b>  CDRAC handles all ZTE IN CDR types	
<b>Detailed Requirement:</b>  Target system will handle all ZTE IN CDRs except for the CDR coming for the prepaid services (PPC and CCS). Filtering of IN services will be based on serviceKey field	
 Note:	

<b>ID#: EMM-USC-025</b>	<b>Raised by: -</b>
<b>UR: Number Normalization</b>	
<b>Current Flow:</b>  Dialled number is normalized by adding a prefix of 963.	
<b>Detailed Requirement:</b>  The target system should comply to the following number normalization rules: <ol style="list-style-type: none"> <li>For all national calls, dialled number shall be normalized by removing 0 and adding the country code 963 as prefix.</li> <li>For the short codes 132 and 163, dialled number shall be normalized by adding the country code prefix 963 and the LAC 11 i.e. 96311</li> <li>Dialled number should be normalized by removing 00, if present, for all international calls</li> </ol>	
 Note:	

<b>ID#: EMM-USC-026</b>	<b>Raised By:</b>
<b>UR: Ericsson Switches CDRs Formatting</b>	


Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

**Current Flow:**

CDRAC is changing the Ericsson switch UMRs/CDRs to be compliant with BSCS R1 required format.

**Detailed Requirement:**

The target system mediation's system shall format the decoded Ericsson Switch CDRs from ASN.1/ISO to BSCS iX UDR Format.


 *Note:*

**ID#: EMM-USC-027**
**Raised By:**
**UR: Siemens Switches CDRs Formatting**
**Current Flow:**

CDRAC is changing Siemens switch CDRs to be compliant with BSCS R1 required format.

**Detailed Requirement:**

The target system's mediation system shall format the decoded Siemens Switch CDRs to BSCS iX UDR Format.

 *Note:*

**ID#: EMM-USC-029**
**Raised by: -**
**UR: Siemens Switches Partial Call Handling**
**Current Flow:**

In existing architecture, partial call records are generated by Siemens switch as the switch generates CDR files every 30 minutes. These partial calls are transferred to CDRAC mediation application via ftp during billing cycle. CDRAC application process the CDRs and provide ascii files to BSCS billing system. These partial call CDRs are assembled and charged with-in BSCS.


**Detailed Requirement:**


The target system should comply to the followings:


- Should collect CDR files having partial call records from switch
- Should identify the partial calls
- Should assemble all partial call records into single record
- Charge the call as single call



Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

 *Note:*


<b>ID#: EMM-USC-030</b>	<b>Raised By:</b>
<b>UR: Huawei ATS CDRs Formatting</b>	
<b>Current Flow:</b>  Currently, CDRAC is changing IMS UMRs/CDRs from “Isolv” output which is identical to E/// format to be compliant with BSCS R1 required format.	
<b>Detailed Requirement:</b>  The target system shall collect directly from switch and format the decoded Huawei ATS CDRs to BSCS iX UDR Format. UMRs will no longer be used.	
 <i>Note:</i>	


<b>ID#: EMM-USC-031</b>	<b>Raised By:</b>
<b>UR: Samsung Switches UMRs Formatting</b>	
<b>Current Flow:</b>  Currently, CDRAC is changing the Samsung switch UMRs to be compliant with BSCS R1 required format.	
<b>Detailed Requirement:</b>  The target system’s mediation system shall format the decoded Samsung Switch UMRs (Usage Metering Records) from the format indicated in Reference 7 to BSCS iX UDR Format.	
 <i>Note:</i>	

<b>ID#: EMM-USC-032</b>	<b>Raised By:</b>
<b>UR: Huawei AAA CDRs Formatting</b>	
<b>Current Flow:</b>  N/A	
<b>Detailed Requirement:</b>  The target system shall format the decoded Huawei AAA CDRs in BSCS iX UDR Format.	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

 *Note:*


<b>ID#: EMM-USC-033</b>	<b>Raised By:</b>
<b>UR: ZTE IN Usage CDRs Formatting</b>	
<b>Current Flow:</b>  CDRAC currently formats the output in semicolon separated format, with various fields as per record types.	
<b>Detailed Requirement:</b>  The target system shall format the decoded ZTE IN Usage CDRs in BSCS iX UDR Format.	
 <i>Note:</i>	


<b>ID#: EMM-USC-055</b>	<b>Raised By:</b>
<b>UR: IN FPH Monthly Fees CDRs Formatting</b>	
<b>Current Flow:</b>  CDRAC currently formats the output in semicolon separated format, with various fields as per record types.	
<b>Detailed Requirement:</b>  The target system shall format the decoded IN FPH Monthly Fees CDRs in BSCS iX UDR Format.	
 <i>Note:</i>	


<b>ID#: EMM-USC-056</b>	<b>Raised By:</b>
<b>UR: IN UAN Monthly Fees CDRs Formatting</b>	
<b>Current Flow:</b>  CDRAC currently formats the output in semicolon separated format, with various fields as per record types.	
<b>Detailed Requirement:</b>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

The target system shall format the decoded IN UAN Monthly Fees CDRs in BSCS iX UDR Format.

 Note:

<b>ID#: EMM-USC-057</b>	<b>Raised By:</b>
<b>UR: IN VPN Monthly Fees CDRs Formatting</b>	
<b>Current Flow:</b>  CDRAC currently formats the output in semicolon separated format, with various fields as per record types.	
<b>Detailed Requirement:</b>  The target system shall format the decoded IN VPN Monthly Fees CDRs in BSCS iX UDR Format.	
 Note:	


<b>ID#: EMM-USC-058</b>	<b>Raised By:</b>
<b>UR: IN PNS Monthly Fees CDRs Formatting</b>	
<b>Current Flow:</b>  CDRAC currently formats the output in semicolon separated format, with various fields as per record types.	
<b>Detailed Requirement:</b>  The target system shall format the decoded IN PNS Monthly Fees CDRs in BSCS iX UDR Format.	
 Note:	


<b>ID#: EMM-USC-059</b>	<b>Raised By:</b>
<b>UR: Real IP Monthly Fees CDRs Formatting</b>	
<b>Current Flow:</b>  CDRAC currently formats the output in semicolon separated format, with various fields as per record types.	


Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

**Detailed Requirement:**

The target system shall format the decoded Real IP Monthly Fees CDRs in BSCS iX UDR Format.


 Note:


<b>ID#: EMM-USC-060</b>	<b>Raised By:</b>
<b>UR: Telegram Monthly Fees CDRs Formatting</b>	
<b>Current Flow:</b>  CDRAC currently formats the output in semicolon separated format, with various fields as per record types.	
<b>Detailed Requirement:</b>  The target system shall format the decoded Telegram Monthly Fees CDRs in BSCS iX UDR Format.	
 Note:	

<b>ID#: EMM-USC-061</b>	<b>Raised By:</b>
<b>UR: Hosting Monthly Fees CDRs Formatting</b>	
<b>Current Flow:</b>  CDRAC currently formats the output in semicolon separated format, with various fields as per record types.	
<b>Detailed Requirement:</b>  The target system shall format the decoded Hosting Monthly Fees CDRs in BSCS iX UDR Format.	
 Note:	


<b>ID#: EMM-USC-069</b>	<b>Raised by: -</b>
<b>UR: Prepend prefix to defined short codes</b>	
<b>Current Flow:</b>  N/A	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

<b>Detailed Requirement:</b>				
The target system shall allow administrator to prepend 96311 to defined short codes.				
 <i>Note:</i>				


<b>ID#: EMM-USC-070</b>	<b>Raised by: -</b>
<b>UR: Changing Original Called Party Number</b>	
<b>Current Flow:</b>	
N/A	
<b>Detailed Requirement:</b>	
For defined IN services, target system shall replace the called party number with another number before distribution. The mapping between the original called party number and the target number will be configured by the admin.	
 <i>Note:</i>	


#### 2.2.1.1.3 Distribution

<b>ID#: EMM-USC-034</b>	<b>Raised By:</b>
<b>UR: Ericsson Switches CDRs Distribution</b>	
<b>Current Flow:</b>	
Currently, CDRAC is distributing its output for Ericsson switches UMRs/CDRs to BSCS R1 and ST Fraud system only.	
<b>Detailed Requirement:</b>	
The target system shall distribute the formatted Ericsson CDRs to: <ul style="list-style-type: none"> <li>BSCS iX system</li> <li>ST existing Fraud system</li> </ul>	
 <i>Note:</i>	

<b>ID#: EMM-USC-035</b>	<b>Raised By:</b>
-------------------------	-------------------

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference


<b>UR: Siemens Switches CDRs Distribution</b>	
<b>Current Flow:</b>  Currently, CDRAC is distributing Siemens switches UMRs (Usage Metering Records) and CDRs (Call Detail Records) to BSCS R1 and ST Fraud system only.	
<b>Detailed Requirement:</b>  The target system shall distribute the formatted Siemens CDRs to: <ul style="list-style-type: none"> <li>BSCS iX system</li> <li>ST existing Fraud system</li> </ul>	
 <i>Note:</i>	


<b>ID#: EMM-USC-036</b>	<b>Raised By:</b>
<b>UR: Samsung Switches UMRs Distribution</b>	
<b>Current Flow:</b>  Currently, CDRAC is distributing its output for Samsung switches UMRs to BSCS R1 and ST Fraud system only.	
<b>Detailed Requirement:</b>  The target system shall distribute the formatted Samsung UMRs (Usage Metering Records) to: <ul style="list-style-type: none"> <li>BSCS iX system</li> <li>ST existing Fraud system</li> </ul>	
 <i>Note:</i>	

<b>ID#: EMM-USC-037</b>	<b>Raised By:</b>
<b>UR: Huawei ATS CDRs Distribution</b>	
<b>Current Flow:</b>  ATS CDRs are handled via CDRAC in the same manner the Exchanges CDRs are handled	
<b>Detailed Requirement:</b>  The target system shall distribute the formatted Huawei ATS CDRs to: <ul style="list-style-type: none"> <li>BSCS iX system</li> <li>ST existing Fraud system</li> </ul>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

 *Note:*

<b>ID#: EMM-USC-038</b>	<b>Raised By:</b>
<b>UR: Huawei AAA CDRs Distribution</b>	
<b>Current Flow:</b>  N/A	
<b>Detailed Requirement:</b>  The target system shall distribute the formatted Huawei AAA CDRs to: <ul style="list-style-type: none"> <li>BSCS iX system</li> <li>ST existing Fraud system</li> </ul>	
 <i>Note:</i>	

<b>ID#: EMM-USC-039</b>	<b>Raised By:</b>
<b>UR: ZTE IN Usage CDRs Distribution</b>	
<b>Current Flow:</b>  N/A	
<b>Detailed Requirement:</b>  The target system shall distribute the formatted ZTE IN Usage CDRs to: <ul style="list-style-type: none"> <li>BSCS iX system</li> <li>ST existing Fraud system</li> </ul>	
 <i>Note:</i>	

<b>ID#: EMM-USC-062</b>	<b>Raised By:</b>
<b>UR: IN FPH Monthly Fees CDRs Distribution</b>	
<b>Current Flow:</b>  N/A	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

**Detailed Requirement:**

The target system shall distribute the formatted IN FPH Monthly Fees CDRs to:

- BSCS iX system

 Note:


**ID#: EMM-USC-063****Raised By:****UR: IN UAN Monthly Fees CDRs Distribution****Current Flow:**

N/A

**Detailed Requirement:**

The target system shall distribute the formatted IN UAN Monthly Fees CDRs to:

- BSCS iX system

 Note:


**ID#: EMM-USC-064****Raised By:****UR: IN VPN Monthly Fees CDRs Distribution****Current Flow:**

N/A

**Detailed Requirement:**

The target system shall distribute the formatted IN VPN Monthly Fees CDRs to:

- BSCS iX system

 Note:

**ID#: EMM-USC-065****Raised By:****UR: IN PNS Monthly Fees CDRs Distribution****Current Flow:**

N/A



Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

**Detailed Requirement:**

The target system shall distribute the formatted IN PNS Monthly Fees CDRs to:

- BSCS iX system

 Note:


**ID#: EMM-USC-066****Raised By:****UR: Real IP Monthly Fees CDRs Distribution****Current Flow:**

N/A

**Detailed Requirement:**

The target system shall distribute the formatted Real IP Monthly Fees CDRs to:

- BSCS iX system

 Note:


**ID#: EMM-USC-067****Raised By:****UR: Telegram Monthly Fees CDRs Distribution****Current Flow:**

N/A

**Detailed Requirement:**

The target system shall distribute the formatted Telegram Monthly Fees CDRs to:

- BSCS iX system

 Note:

**ID#: EMM-USC-068****Raised By:****UR: Hosting Monthly Fees CDRs Distribution****Current Flow:**

N/A

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

**Detailed Requirement:**


The target system shall distribute the formatted Hosting Monthly Fees CDRs to:

- BSCS iX system

 *Note:*

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference


## 2.2.2 Non-Functional Requirements


<b>ID#: EMM-NFR-001</b>	<b>Raised By:</b>
<b>UR: CDR and UMR Retention Period</b>	
<b>Detailed Requirement:</b>  The target system should never delete the collected and distributed UMRs (Usage Metering Records) and CDRs. Instead, processed CDRs and UMRs will be moved to a separate directory and stored there. ST must maintain the EMM storage space by deleting or archiving stored CDRs and UMRs whenever the remaining free storage space reaches 30%	
 <i>Note:</i>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

## 2.3 Architectural Block Bpmonline

### 2.3.1 Contact Center

<b>ID#: BPM-CCR-001</b>	<b>Raised By:</b>
<b>UR: Contact Types</b>	
<b>Current Flow:</b>  CRM provides the ability to create Private customer for residential customer, official customer for customers owned or related to the government and company customers for companies.	
<b>Detailed Requirement:</b>  In the target system, CRM should provide the option to create the following Contact Types: <ul style="list-style-type: none"> <li>Retail</li> </ul>	
 <i>Note:</i>	

<b>ID#: BPM-CCR-002</b>	<b>Raised By:</b>
<b>UR: Account Types</b>	
<b>Current Flow:</b>  CRM provides the ability to create Private customer for residential customer, official customer for customers owned or related to the government and company customers for companies.	
<b>Detailed Requirement:</b>  In the target system, CRM should provide the option to create the following Account Types: <ul style="list-style-type: none"> <li>Official</li> <li>Enterprise</li> </ul>	
 <i>Note:</i>	

<b>ID#: BPM-CCR-003</b>	<b>Raised by: -</b>
<b>UR: Create Retail Syrian Customer</b>	

Prepared (Subject resp)		No.		
Marwan Khoury		1029-FCP 132 1747		
Approved (Document resp)	Checked	Date	Rev	Reference
Ziad Hobeika		2018-07-10	D	

**Current Flow:**

The creation of a private Syrian customer in CRM system offer the following attributes: personal information, address information, contact information, file properties and ID card information. CRM system considers the card ID information as the customer's unique identifier and use it to validate the customer existence in the system.


This offers ST the possibility to aggregate all customer's contracts in one file. CRM makes validation on the data entry.

**Detailed Requirement:**

In the target system, the creation of a Retail Syrian Customer shall offer the following information to be filled by CSR:

- Contact information.
- Address information.
- Billing and Payment Information
- File Properties including Customer Group
- Document ID information

The CRM system shall use the customer's national ID to uniquely identify him and his existence in the system.


 *Note: BPM have the possibility to integrate with a barcode reader and fingerprint reader if supported SDKs are provided.*

<b>ID#: BPM-CCR-004</b>	<b>Raised by: -</b>
<b>UR: Create Retail Non-Syrian Customer</b>	
<b>Current Flow:</b> <p>Foreigner customer is created in CRM system by filling the following information: personal information, address information, contact information, file properties, passport information and Syrian sponsor information.</p>	
<b>Detailed Requirement:</b> <p>In the target system, the creation of a Retail Non-Syrian Customer shall offer the following information to be filled by CSR:</p> <ol style="list-style-type: none"> <li>Contact information.</li> <li>Address information.</li> <li>Billing and Payment Information</li> <li>File Properties including Customer Group</li> <li>Document ID information</li> <li>Link to a Contact representing the sponsor. The linked-to contact must be of Syrian Nationality</li> </ol>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

CRM should validate the customer data entry.


 *Note:*

<b>ID#: BPM-CCR-005</b>	<b>Raised by: -</b>
<b>UR: Create Official Customer</b>	
<b>Current Flow:</b>  CRM provides a dedicated representation for the official customer, the official file consists of: contact information, address information and file properties, CRM system allows the CSR to fill that data and to update them.	
<b>Detailed Requirement:</b>  The target system shall provide the possibility to create an Account of Type Official. This account shall offer the following information to be filled by CSR: <ul style="list-style-type: none"> <li>a. Account information</li> <li>b. Contact Information</li> <li>c. Billing and Payment Information</li> <li>d. The account address information</li> <li>e. File Properties including Customer Group</li> </ul>	
 <i>Note:</i>	

<b>ID#: BPM-CCR-006</b>	<b>Raised by: -</b>
<b>UR: Create Enterprise Customer</b>	
<b>Current Flow:</b>  CRM provides the ability to define a company customer by filling the required information: company commercial information, the contact person for the company, the company address and file properties, CRM counts on the commercial information to check the existence of the company in CRM before.	
<b>Detailed Requirement:</b>  The target system shall provide the possibility to create an Account of Type Enterprise. This account shall offer the following information to be filled by CSR: <ul style="list-style-type: none"> <li>a. Account information</li> <li>b. Contact Information</li> <li>c. Billing and Payment Information</li> <li>d. The company address information</li> <li>e. File Properties including Customer Group</li> </ul>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

 Note:

<b>ID#: BPM-CCR-008</b>	<b>Raised By: -</b>
<b>UR: Contacts Mapping to Customer Groups</b>	
<b>Current Flow:</b>  CRM has a list of customers universes that are mapped to customer categories defined in BSCS. The current mapping is defined as follows;  (Customer Group in BSCS → Customer Universe in CRM) Official → OFFICIAL Private → PRIVATE STE Coin Box → OFFICIAL STE Internal → OFFICIAL Public company → OFFICIAL Private Company → COMPANY Journalist → PRIVATE Ambassy → PRIVATE Bourak coin box → PRIVATE STE Employee → PRIVATE Rural coin box → PRIVATE Telecom Ministry Employee → PRIVATE STE Manager → OFFICIAL STE Director → OFFICIAL FTTB Private → PRIVATE FTTB Company → COMPANY FTTB Official → OFFICIAL	
<b>Detailed Requirement:</b>  Target system shall support a “many to many” mapping between Contact/Account Types in CRM and Customer Groups in BSCS.	
 Note:	

<b>ID#: BPM-CCR-009</b>	<b>Raised By: -</b>
<b>UR: Validate Existing Customer</b>	
<b>Current Flow:</b>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

N/A
<b>Detailed Requirement:</b>  Target system should validate that the customer or account is not already present in CRM.
<i>Note:</i>


<b>ID#: BPM-CCR-010</b>	<b>Raised By: -</b>
<b>UR: Reading Customer Status</b>	
<b>Current Flow:</b>  The subscriber is created in CRM with the status “prospect”, till he is synchronized on all other systems then his status will be turned to “customer”, if the customer is in debt his status will be “blacklisted” then he can’t take any action on his contracts or his file.	
<b>Detailed Requirement:</b>  The customer status (Prospect, Active, Suspended, Deactivated) shall be retrieved from billing system. Updating the customer status shall not be available on CRM.	
<i>Note:</i>	


<b>ID#: BPM-CCR-011</b>	<b>Raised By: -</b>
<b>UR: Blacklisted Customer</b>	
<b>Current Flow:</b>  The subscriber is created in CRM with the status “prospect”, till he is synchronized on all other systems then his status will be turned to “customer”, if the customer is in debt his status will be “blacklisted” then he can’t take any action on his contracts or his file.	
<b>Detailed Requirement:</b>  Target system shall provide the possibility to blacklist a customer. A reason for adding the customer to blacklist should be provided by CSR and saved on CRM. The blacklisted state is only available and saved on CRM.	




Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference


 Note:

<b>ID#: BPM-CCR-012</b>	<b>Raised By: -</b>
<b>UR: Blacklisted Customer Restrictions</b>	
<b>Current Flow:</b>  <p>The customer is created in CRM with the status “prospect”, till he is synchronized on all other systems then his status will be turned to “customer”, if the customer is in debt his status will be “blacklisted” then he can’t take any action on his contracts or his file.</p>	
<b>Detailed Requirement:</b>  <p>System shall not allow a blacklisted customer to order any service, subscribe to a new contract or request any operation on his existing contracts or services. However, his existing services and contracts will remain active.</p> <p>A customer that is already black-listed based on ST request, must have the national ID saved in CRM with status blacklisted. Thus, target system shall not allow creation or subscriptions of these customers holding this national ID.</p> <p>Advantageous operations are also not allowed for blacklisted customers.</p>	
 Note:	


<b>ID#: BPM-CCR-013</b>	<b>Raised By: -</b>
<b>UR: Updating Customer Information</b>	
<b>Current Flow:</b>  <p>CRM provides the ability to update the editable customer information for all customers’ types based on user profile and access rights, some data are updated locally on CRM while others are synchronized with other systems.</p>	
<b>Detailed Requirement:</b>  <p>System should offer users with appropriate rights the possibility of updating</p> <ul style="list-style-type: none"> <li>• Contact Information</li> <li>• Address information.</li> <li>• Billing and Payment Information</li> </ul>	
 Note:	


Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

<b>ID#: BPM-CCR-014</b>	<b>Raised By: -</b>
<b>UR: Change Payment Method</b>	
<b>Current Flow:</b>  Only Cash option is available.	
<b>Detailed Requirement:</b>  The target system shall provide two possible payment methods to the subscriber: <ul style="list-style-type: none"> <li>• Cash</li> <li>• Debit: When choosing this option, relevant parameters related to direct debit payments from a specific bank must be filled: <ol style="list-style-type: none"> <li>a. End customer went to bank to enrol for direct debit mode of payment and in-turn Bank sends out a communication in form of a file. This file shall be consumed by CRM and the with-in information needs to be provisioned to BSCS.</li> <li>b. End customer went to CSO to enrol direct debit mode of payment and in-turn CRM will provision the new payment mode for the customer in BSCS.</li> </ol> </li> </ul>	
 <i>Note:</i>	

<b>ID#: BPM-CCR-015</b>	<b>Raised By: -</b>
<b>UR: Customer File Display</b>	
<b>Current Flow:</b>  CRM provides the ability to view all the customer data, billing data, historical requested operations, pending requests, changes on the customer file and payments information.	
<b>Detailed Requirement:</b>  System should offer users with appropriate rights the possibility of displaying, when available: <ul style="list-style-type: none"> <li>• Personal Customer Information</li> <li>• Billing Data</li> <li>• History of requested operations</li> <li>• Payments information.</li> </ul>	
 <i>Note:</i>	

Prepared (Subject resp)		No.		
Marwan Khoury		1029-FCP 132 1747		
Approved (Document resp)	Checked	Date	Rev	Reference
Ziad Hobeika		2018-07-10	D	


<b>ID#: BPM-CCR-016</b>	<b>Raised By: -</b>
<b>UR: Enable IVR Usage</b>	
<b>Current Flow:</b>  CRM provides the ability to the CSR to enable IVR usage for subscriber allowing the customer to inquire on his bill through IVR	
<b>Detailed Requirement:</b>  Target system shall provide an option to the CSR to enable IVR usage for the customer. An external system, outside the offered CCBS solution (such as IVR), shall verify whether the customer can use the IVR by checking if his IVR Usage was enabled.	
 <i>Note:</i>	


<b>ID#: BPM-CCR-017</b>	<b>Raised By: -</b>
<b>UR: Set IVR Password</b>	
<b>Current Flow:</b>  CRM provides the ability to the CSR to set a password on the customer IVR service, by setting the password IVR system will ask for a password on each bill inquiry request.	
<b>Detailed Requirement:</b>  Target system shall provide an option to the CSR to set a password for the customer IVR service. System shall not store the password and will post it on an external system (such as IVR).	
 <i>Note:</i>	


<b>ID#: BPM-CCR-018</b>	<b>Raised By: -</b>
<b>UR: Set Selfcare Password</b>	
<b>Current Flow:</b>  CRM provides the ability to change the self-care password for the customer, CRM overwrites the existing password on self-care system.	
<b>Detailed Requirement:</b>  	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

Target system shall provide an option to the CSR to set a password for the Selfcare portal. System shall not store the password and will post it on Selfcare.

 Note:

<b>ID#: BPM-CCR-019</b>	<b>Raised By: -</b>
<b>UR: Setting Directory Inquiry Option</b>	
<b>Current Flow:</b>  In existing architecture: CRM provide the CSR the ability to hid/show all the customer's phone numbers from directory inquiry service, based on customer request.	
<b>Detailed Requirement:</b>  Target system shall provide the option to hide or show any of the customer's phone number from the directory inquiry service based on customer request. An external system, outside the offered CCBS solution (such as DI), shall verify whether a specific number should be divulged to public entities by checking whether the customer's phone number has the Directory Inquiry option enabled.	
 Note:	

<b>ID#: BPM-CCR-022</b>	<b>Raised By: -</b>
<b>UR: Check Order Status</b>	
<b>Current Flow:</b>  CRM defines many statuses for the request: open (pending is CRM), under processing (posted to order manager), closed, technically closed (closed manually or for some reasons), just created (CRM delete them automatically).	
<b>Detailed Requirement:</b>  Target system shall provide the CSR with the possibility to check the status of an order.	
 Note:	

<b>ID#: BPM-CCR-023</b>	<b>Raised By: -</b>
<b>UR: Identify Calling Customer</b>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference


**Current Flow:**

ST uses an external CTI tool developed by ALU to open the customer file on receiving call. This interface is not working

**Detailed Requirement:**

System shall interact with the Alcatel CCAgent PC phone to identify the calling customer and open his file. This functionality requires the CSR to have the proper applications, from both bpmonline and Alcatel, installed on his Desktop/Laptop.

 Note:


<b>ID#: BPM-CCR-024</b>	<b>Raised By: -</b>
<b>UR: Customer Care Workflow Definition</b>	
<b>Current Flow:</b>  All work orders reside in CRM	
<b>Detailed Requirement:</b>  Target system shall define Customer Care Workflows permitting a manual or automatic <ul style="list-style-type: none"> <li>• Initiation of work orders</li> <li>• Routing of work orders to specific users.</li> <li>• Closing of work orders</li> </ul> Work orders can be sent/received from external applications or generated internally	
 Note:	


<b>ID#: BPM-CCR-025</b>	<b>Raised By: -</b>
<b>UR: Customer Search</b>	
<b>Current Flow:</b>  CRM provides many search options like: Search by customer name, province, CSO, creation date, CRM ID, passport ID, customer status, or national ID ... CRM provides search by that fields or a combination of them.	
<b>Detailed Requirement:</b>  Target system shall provide the following customer search criteria:	

Prepared (Subject resp)		No.		
Marwan Khoury		1029-FCP 132 1747		
Approved (Document resp)	Checked	Date	Rev	Reference
Ziad Hobeika		2018-07-10	D	

- a. First Name
- b. Last Name
- c. Phone Number
- d. National ID
- e. Customer ID

Additional search criteria may be added using BPM filter in case the criteria field is available.

 Note:


<b>ID#: BPM-CCR-026</b>	<b>Raised By: -</b>
<b>UR: Contract Search</b>	
<b>Current Flow:</b>  CRM provides an option for a search by phone number, CRM returns a list of all contracts used this phone number with their statuses.	
<b>Detailed Requirement:</b>  Target system shall provide the following contract search criteria: <ul style="list-style-type: none"> <li>a. Phone Number</li> <li>b. Prefix of Phone number</li> </ul>	
 Note:	

<b>ID#: BPM-CCR-027</b>	<b>Raised By: -</b>
<b>UR: Order Search</b>	
<b>Current Flow:</b>  CRM provides an option for a search for a request based on many parameters like: province, Switch, Cabinet, DP, phone number, request date..., CRM returns a list of all requests, customer name, status then CSR can open the needed request.	
<b>Detailed Requirement:</b>  Target system shall provide the following order search criteria. The limit of the search history period will be based on CRM disk capacity and not time based. ST daily operation team should make sure that the free disk space does not fall below 30% when the platforms become in production mode. This to prevent unwanted service disturbances related to disk space	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

- a. Province
- b. Switch
- c. Cabinet
- d. DP
- e. Phone Number
- f. Request Date

 Note:

<b>ID#: BPM-CCR-028</b>	<b>Raised By: -</b>
<b>UR: Auditing Customer Information Updates</b>	
<b>Current Flow:</b>  CRM provides the ability to follow up any changes which may be made on a customer level, so each change on customer data is registered with the old value, new value, date and the responsible user.	
<b>Detailed Requirement:</b>  CRM should provide the ability to save the history of the changes made on the Customer Information. The limit of the search history period will be based on CRM disk capacity and not time based. ST daily operation team should make sure that the free disk space does not fall below 30% when the platforms become in production mode. This to prevent unwanted service disturbances related to disk space	
 Note:	


<b>ID#: BPM-CCR-029</b>	<b>Raised By:</b>
<b>UR: CRM Users</b>	
<b>Current Flow:</b>  N/A	
<b>Detailed Requirement:</b>  The Target system shall host the following users on CRM platform. <ul style="list-style-type: none"> <li>a. CSR</li> <li>b. HR</li> </ul>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

- c. Accounting team
- d. Tarasul (one user per province)
- e. FMC
- f. DI team
- g. Administrative Team
- h. MDF Team
- i. Switch Team
- j. Technical Team
- k. OMC Team

CRM provides ability to create additional users.  
The total number of users shall be limited by the contracted license.

 *Note:*

<b>ID#: BPM-CCR-030</b>	<b>Raised By:</b>
<b>UR: Contact Sub-types</b>	
<b>Current Flow:</b>	
N/A	
<b>Detailed Requirement:</b>	
<p>CRM shall provide the possibility of choosing contacts sub-types. The sub-types are retrieved from the BSCS categories and displayed in a dropdown box to the CSR. For the following sub-types a proof document shall be attached to the customer profile by the CSR:</p> <ul style="list-style-type: none"> <li>• Martyr family</li> <li>• Engineers</li> <li>• Lawyers</li> </ul> <p>Target system shall provide ability to create/edit contact sub-types.</p>	
 <i>Note:</i>	

<b>ID#: BPM-CCR-031</b>	<b>Raised By:</b>
<b>UR: Activate service through call centre</b>	
<b>Current Flow:</b>	
N/A	




Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

**Detailed Requirement:**


Customer can request activation of specific services through call center.

No additional fees will be added if the service is requested through call center  
Only certain services will be seen by the call center agent.

 *Note:*

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

### 2.3.1 Customer Assurance

<b>ID#: BPM-CAS-001</b>	<b>Raised By: -</b>
<b>UR: Generate Documents Based on Template</b>	
<b>Current Flow:</b>  CRM can generate many documents based on stored templates, CRM generates the (subscription, change owner...) contract document and prints it to be signed by the customer, this document will be stored in the archive out of CCBS, and another copy of that document (before sign) will be stored on CCBS file system.	
<b>Detailed Requirement:</b>  Target system shall provide option for the CSR to generate document based on a template. The predefined templates shall be: <ul style="list-style-type: none"> <li>• Leased Line</li> <li>• Change ADSL Owner</li> <li>• Change phone owner</li> <li>• Change PN (same switch)</li> <li>• Telephony Contract subscription</li> <li>• Contract cancellation</li> <li>• Telephony line moving (new switch)</li> <li>• Telephony line movingLine moving (same switch)</li> <li>• FTTB Contract Subscription</li> <li>• GSHDSL Contract Subscription</li> <li>• ADSL Contract Subscription</li> <li>• Instalment Creation</li> <li>• Approval document</li> <li>• Change xDSL Password</li> </ul> These templates shall be provided by ST and hosted on the CCBS system.	
 <i>Note:</i>	


<b>ID#: BPM-CAS-002</b>	<b>Raised By: -</b>
<b>UR: Attach Documents</b>	
<b>Current Flow:</b>  N/A	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

**Detailed Requirement:**

The target system shall allow the CSR to attach documents that are required for the legal or business fulfilment. For example, a signed Subscription Contract document is attached to the Subscription Order.

 Note:

<b>ID#: BPM-CAS-003</b>	<b>Raised By: -</b>
<b>UR: Register Technical Complaint</b>	
<b>Current Flow:</b>  CRM provides the ability to call centre team to get the customer's call and collect the needed information about the complaint and fill the complaint template that is linked to the complaint and the phone number of the Technical reservation.	
<b>Detailed Requirement:</b>  Target system should allow call centre agent to register customer complaints of the following categories: <ul style="list-style-type: none"> <li>• Telephony Line.</li> <li>• FTTB</li> <li>• ADSL: In case the ADSL contract is not directly with ST, the ADSL complaint is registered under telephony.</li> <li>• Leased Line</li> <li>• IPTV: IPTV complaints are registered under telephony line if the ADSL ISP is private. If the corresponding ADSL provider is Tarasul, IPTV complaints are then registered under ADSL complaints.</li> </ul> <p>Depending on the complaint type and the designed workflow, a complaint will be created and sequentially assigned to a specific user (automatically or manually) until its closure.</p> <p>During a Technical Complaint, when the complaint reaches the FMC team, the commands Test Line, Test Device and Line Status are available for the FMC use in their own complaint page only.</p>	
 Note:	

<b>ID#: BPM-CAS-004</b>	<b>Raised By: -</b>
<b>UR: Register Administrative Complaint</b>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

**Current Flow:**

CRM provides the ability to CSR to choose the invoices for the complaint or even all the customer financial profile to be reviewed by the administration team, the CSR can add notes to determine the exact issue in invoices, CRM should flag the selected invoices to be excluded out of dunning process or all the customer if the complaint was on the customer billing profile.


**Detailed Requirement:**


Target system should allow CSR to register an administrative complaint upon customer's request.

If the administrative complaint is over invoice, then:

- System shall provide the CSR with the possibility to choose specific invoices for the complaint or all the customer financial profile to be reviewed and add notes describing the reason of the complaint.
- Upon submitting the complaint, the disputed invoices shall be excluded from collection process.

The administrative complaint workflow shall follow the agreed 'administrative complaint' design that was shared from ST.

 Note:

<b>ID#: BPM-CAS-005</b>	<b>Raised By: -</b>
<b>UR: Close Technical Complaint</b>	
<b>Current Flow:</b>  CRM provides the ability to close the complaint after solving the issue.	
<b>Detailed Requirement:</b>  Target system shall provide the possibility to close a technical complaint. Closing the complaint shall not be possible without entering a descriptive text.	
 Note:	


<b>ID#: BPM-CAS-006</b>	<b>Raised By: -</b>
<b>UR: Close Administrative Complaint</b>	
<b>Current Flow:</b>	


Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

CRM allows the administrative team to give their decision based on the outcome of the administrative complaint to send request to accounting team to make write off on customer invoices if the customer complaint was true, On the other hand, if the complaint was incorrect, CRM should bill the customer with disturbance fee. CRM removes the administrative complaint flag then dunning will consider the selected invoices in the next run.

#### Detailed Requirement:

Target system shall provide the possibility to close an administrative complaint. Disputed invoices, if they still exist, will no longer be exempted from collection process. In addition, if the customer dispute was invalid, a defined disturbance fee shall be posted to customer's bill as charges upon closing the administrative complaint.

 Note:

<b>ID#: BPM-CAS-007</b>	<b>Raised By: -</b>
<b>UR: ISP registered complaints</b>	
<b>Current Flow:</b>	
N/A	
<b>Detailed Requirement:</b>	
Target system shall have an indication in complaint registry pointing out that the complaint is raised by a Tarassul's ISP. Only Tarassul user can register an ADSL complaint. Other ISP customers check with their ISP for ADSL issues and can request for Telephony line complaint with ST.	
 Note:	


<b>ID#: BPM-CAS-008</b>	<b>Raised By: -</b>
<b>UR: Complaint delay cause</b>	
<b>Current Flow:</b>	
N/A	


Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

**Detailed Requirement:**

Target system shall allow the FMC supervisor to set the complaint delay cause. The causes can be one of the following:

- Issue in network.
- Delay caused by handling personnel.
- Other

 Note:


<b>ID#: BPM-CAS-009</b>	<b>Raised By: -</b>
<b>UR: Supervise delayed cases</b>	
<b>Current Flow:</b>  N/A	
<b>Detailed Requirement:</b>  CRM shall provide a monitoring process that checks for open cases whose time has superseded a certain threshold. The process shall notify a list of CRM users about these open cases.	
 Note:	

<b>ID#: BPM-CAS-010</b>	<b>Raised By: -</b>
<b>UR: Business line subscription templates process</b>	
<b>Current Flow:</b>	
<b>Detailed Requirement:</b>  Target system shall generate a subscription request form and subscription contract form automatically for every business line - Telephony, xDSL, Fiber, Leased Line – offered by ST.  Filled ‘Subscription requests forms’ and ‘Contracts forms’ should automatically be saved in CRM for every business line after CSR proceeds to the next step.  The process is as follows: <ol style="list-style-type: none"> <li>Customer request a new contract</li> <li>CSR starts the operation</li> </ol>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

3. BPM automatically generates a request form filled with the customer information
4. CSR prints the request and asks the customer to sign it
5. When CSR goes to the next step, the request is saved as part of the customer file and the CSR reaches order technical possibility steps.
  - If there is no technical possibility, CSR can optionally send the request to the Network Supervisor if the port is unavailable on Cabinet or DP.
    - The technical team will then investigate the availability.
      - a- If the technical unavailability was confirmed, request is sent back to CSR and remains open for 45 days pending customer return. When customer returns, CSR has an option to add him to the waiting list if requested
      - b- If the technical team found an available port, the reservation is sent back to CSR with the chosen port and port's equipment. The request remains open for 45 days pending customer return to resume his subscription.
    - Post 45 days, if the customer did not resume his subscription, request will be closed, and resources are released when applicable.
  - If there is a technical possibility, the CSR goes to the next step where the corresponding business line contract is automatically generated with the customer information
6. CSR prints the request and asks the customer to sign it
7. Customer signs and CSR goes to the next steps (payment....)

Signature verification and waiting for the customer signature is outside CCBS

 Note:


<b>ID#: BPM-CAS-011</b>	<b>Raised By: -</b>
<b>UR: Services request templates process</b>	
<b>Current Flow:</b>	
<b>Detailed Requirement:</b>	
<p>Target System shall generate a service request form automatically for every ordered service in a business line context.</p> <p>The process is as follows:</p> <ol style="list-style-type: none"> <li>1. Customer request a new service on an existing contract</li> </ol>	


Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

2. When the service is requested, and parameters filled (when applicable), CSR goes to the next step where the Service Request template is automatically generated
3. CSR prints the request and asks the customer to sign it
4. CSR proceeds with the service activation order.

Filled service requests forms shall not be saved in the system.

Signature verification and waiting for the customer signature is outside CCBS.

 *Note:*

<b>ID#: BPM-CAS-012</b>	<b>Raised By: -</b>
<b>UR: Administrative complaint template process</b>	
<b>Current Flow:</b>	
<b>Detailed Requirement:</b>	
Target system shall generate an administrative complaint form automatically for every administrative complaint raised.	
The process is as follows:	
<ol style="list-style-type: none"> <li>1. Customer files an administrative complaint</li> <li>2. CSR initiates a complaint</li> <li>3. CRM generates administrative complaint form and displays it along with the customer information filled.</li> <li>4. CSR prints the request and asks the customer to sign it</li> <li>5. The CSR proceeds to the next step and the administrative complaint process defined earlier shall apply.</li> </ol>	
Filled Administrative Complaint Form shall not be saved.	
Signature verification and waiting for the customer signature is outside CCBS	
 <i>Note:</i>	

### 2.3.2 Customer Information Management

<b>ID#: BPM-CIM-001</b>	<b>Raised By: -</b>
<b>UR: Contracts Type</b>	



Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

**Current Flow:**

The currently offered products falls within the Telephony/ADSL and Leased Line Contracts.

**Detailed Requirement:**

The target system should provide the following Contracts Type that covers all the products offered by ST:

1. Telephony
  - Telephony Line includes PSTN/WCDMA/ISDN/DID/PES.
2. Leased Line
3. xDSL
  - ADSL
  - GSHDSL
4. Fibre

Depending on the customer's request, CSR will choose one of the above Contracts Type to cater for the required order.

System must deny any attempt to add a new Contract to a customer with an open balance.


 *Note:*


<b>ID#: BPM-CIM-003</b>	<b>Raised By: -</b>
<b>UR: Retrieve PSTN/ISDN Technical Line Description</b>	
<b>Current Flow:</b>  The CSR can retrieve the technical line description for a PSTN/ISDN/PES phone number.	
<b>Detailed Requirement:</b>  The target system should provide the ability to retrieve the Technical Line Description given a phone number. If the provided phone number is of Line Type PSTN/ISDN, the following parameters shall be retrieved: <ul style="list-style-type: none"> <li>• Vertical MDF and MDF Port</li> <li>• Cabinet, Cabinet Primary Port and Cabinet Secondary Port</li> <li>• DP and DP Port</li> <li>• Switch, Switch Device ID</li> <li>• Switch OMC (If available)</li> </ul>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

If ADSL Line is available, the below additional parameters are retrieved:

- DSLAM and DSLAM Port
- DSLAM OMC (If available)
- DSLAM Type (if available)
- DSLAM contract number (if available)

 Note:

<b>ID#: BPM-CIM-004</b>	<b>Raised By: -</b>
<b>UR: Retrieve WCDMA Technical Line Description</b>	
<b>Current Flow:</b>  The CSR can retrieve the technical line description for a PSTN/ISDN/PES phone number.	
<b>Detailed Requirement:</b>  The target system should provide the ability to retrieve the Technical Line Description given a phone number. If the provided phone number is of Line Type WCDMA, the following parameters shall be retrieved: <ul style="list-style-type: none"> <li>• Transmitter and Transmitter Port</li> <li>• Receiver and Receiver Port</li> <li>• Switch, Switch Device ID</li> <li>• Switch OMC (If available)</li> </ul>	
 Note:	

<b>ID#: BPM-CIM-005</b>	<b>Raised By: -</b>
<b>UR: Retrieve PES Technical Line Description</b>	
<b>Current Flow:</b>  The CSR can retrieve the technical line description for a PSTN/ISDN/PES phone number.	
<b>Detailed Requirement:</b>	


Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference


The target system should provide the ability to retrieve the Technical Line Description given a phone number. If the provided phone number is of Line Type PES, the following parameters shall be retrieved:

- Vertical MDF and MDF Port
- Cabinet, Cabinet Primary Port and Cabinet Secondary Port
- DP and DP Port
- MSAN EID and MSAN TID
- MSAN Type (PSTN or Combo)

If ADSL Line is available and MSAN Type is PSTN, the below additional parameters are retrieved:

- DSLAM and DSLAM Port
- DSLAM OMC (If available)
- DSLAM type (if available)
- DSLAM contract number (if available)

 Note:

<b>ID#: BPM-CIM-006</b>	<b>Raised By: -</b>
<b>UR: DP or Primary Port on Multiplexer</b>	
<b>Current Flow:</b>	
N/A	
<b>Detailed Requirement:</b>	
System should not allow xDSL reservations on any multiplexed DP or Cabinet primary port.	
 Note:	


<b>ID#: BPM-CIM-008</b>	<b>Raised By: -</b>
<b>UR: Telephony Line Reservation Options</b>	
<b>Current Flow:</b>	
The CSR can check the technical possibility for a subscription through CRM system based on the nearby phone number, if the technical possibility is available the customer can get a reservation possibility and continue in subscription operation.	
<b>Detailed Requirement:</b>	


Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

The target system shall provide the CSR with an option to choose the type of Telephony Line requested prior to checking for a Free Telephony Line. The available options shall be

- ISDN
- DID: DIDX, DIDC, DIDM
- DDI
- WCDMA
- PSTN/PES (Default option)

The above options are mutually exclusive and shall be used along with an input phone number to get a Free Telephony Line for reservation

 *Note:*

<b>ID#: BPM-CIM-009</b>	<b>Raised By: -</b>
<b>UR: Get Free PSTN Telephony Line</b>	
<b>Current Flow:</b>	
<p>The CSR can check the technical possibility for a subscription through CRM system based on the nearby phone number, if the technical possibility is available the customer can get a reservation possibility and continue in subscription operation.</p>	
<b>Detailed Requirement:</b>	
<p>The target system shall display the following specific PSTN parameters, based on a given phone number, if the CSR choose the PSTN/PES option and a PSTN Line is available</p> <ul style="list-style-type: none"> <li>• Vertical MDF and MDF Port (connected to the Free Cabinet Primary Port)</li> <li>• Cabinet, a Free Cabinet Primary Port and Cabinet Secondary Port (connected to the Free DP Port)</li> <li>• DP and a Free DP Port</li> <li>• Switch and a Free Switch PSTN Device ID</li> <li>• Switch OMC (If available)</li> </ul> <p>PSTN Line availability is defined by having free ports on the DP, free PSTN Device ID on the Switch and the Switch PSTN Ports threshold has not been reached</p>	
 <i>Note: The provided phone number is usually the neighbour number. This will ensure that the Telephony Line Reservation is happening on the correct DP</i>	

<b>ID#: BPM-CIM-010</b>	<b>Raised By: -</b>
-------------------------	---------------------

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

<b>UR: Get Free PES Telephony Line</b>	
<b>Current Flow:</b>  <p>The CSR can check the technical possibility for a subscription through CRM system based on the nearby phone number, if the technical possibility is available the customer can get a reservation possibility and continue in subscription operation.</p>	
<b>Detailed Requirement:</b>  <p>The target system shall display the following specific PES parameters, based on a given phone number, if the CSR choose the PSTN/PES option and a PES Line is available</p> <ul style="list-style-type: none"> <li>• Vertical MDF and MDF Port (connected to the Free Cabinet Primary Port)</li> <li>• Cabinet, a Free Cabinet Primary Port and Cabinet Secondary Port (connected to the Free DP Port)</li> <li>• DP and a Free DP Port</li> <li>• MSAN EID and a Free MSAN TID</li> <li>• MSAN Type (PSTN or Combo)</li> </ul> <p>PES Line availability is defined by having free ports on the DP, free TID on the MGW and the MGW Ports threshold has not been reached</p> <p><i>Note: The provided phone number is usually the neighbour number. This will ensure that the Telephony Line Reservation is happening on the correct DP</i></p>	

<b>ID#: BPM-CIM-011</b>	<b>Raised By: -</b>
<b>UR: Get Free ISDN Telephony Line</b>	
<b>Current Flow:</b>  <p>The CSR can check the technical possibility for a subscription through CRM system based on the nearby phone number, if the technical possibility is available the customer can get a reservation possibility and continue in subscription operation.</p>	
<b>Detailed Requirement:</b>  <p>The target system shall display the following specific ISDN parameters, based on a given phone number, if the CSR choose the ISDN option and a ISDN Line is available</p> <ul style="list-style-type: none"> <li>• Vertical MDF and MDF Port (connected to the Free Cabinet Primary Port)</li> <li>• Cabinet, a Free Cabinet Primary Port and Cabinet Secondary Port (connected to the Free DP Port)</li> <li>• DP and a Free DP Port</li> </ul>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

- Switch and a Free Switch ISDN Device ID
- Switch OMC (If available)

ISDN Line availability is defined by having free ports on the DP, free ISDN Device ID on the Switch and the Switch ISDN Ports threshold has not been reached

*Note: The provided phone number is usually the neighbour number. This will ensure that the Telephony Line Reservation is happening on the correct DP*

<b>ID#: BPM-CIM-012</b>	<b>Raised By: -</b>
<b>UR: Get Free WCDMA Telephony Line</b>	
<b>Current Flow:</b>  The CSR can check the technical possibility for a subscription through CRM system based on the nearby phone number, if the technical possibility is available the customer can get a reservation possibility and continue in subscription operation.	
<b>Detailed Requirement:</b>  The target system shall display the following specific WCDMA parameters, based on a given phone number, if the CSR choose the WCDMA option and a WCDMA Line is available <ul style="list-style-type: none"> <li>• Transmitter and Free Transmitter Port</li> <li>• Receiver and Free Receiver Port</li> <li>• Switch and a Free Switch WCDMA Device ID</li> <li>• Switch OMC (If available)</li> </ul> WCDMA Line availability is defined by having free ports on the receiver, free WCDMA Device ID on the Switch and the Switch WCDMA Ports threshold has not been reached	
<i>Note: The provided phone number is usually the neighbour number. This will ensure that the Telephony Line Reservation is happening on the correct receiver</i>	

<b>ID#: BPM-CIM-013</b>	<b>Raised By: -</b>
<b>UR: Get Free DID Telephony Line</b>	
<b>Current Flow:</b>  The CSR can check the technical possibility for a subscription through CRM system based on the nearby phone number, if the technical possibility is available the customer can get a reservation possibility and continue in subscription operation.	

Prepared (Subject resp)		No.		
Marwan Khoury		1029-FCP 132 1747		
Approved (Document resp)	Checked	Date	Rev	Reference
Ziad Hobeika		2018-07-10	D	

### Detailed Requirement:

The target system shall display the following specific DID parameters, based on a given phone number, if the CSR choose the DID option and a DID Line is available

- Vertical MDF and MDF Port (connected to the Free Cabinet Primary Port)
- Cabinet, a Free Cabinet Primary Port and Cabinet Secondary Port (connected to the Free DP Port)
- DP and a Free DP Port
- Switch and a Free Switch DID Device ID
- Switch OMC (If available)


DID Line availability is defined by having free ports on the DP and free DID Device IDs on the Switch.

In the event where the DID line is not available, CSR shall post a work-order to the inventory team to manually plan the connectivity and create a line path for this DID subscription.

*Note: The provided phone number is usually the neighbour number. This will ensure that the Telephony Line Reservation is happening on the correct DP*

<b>ID#: BPM-CIM-014</b>	<b>Raised By: -</b>
<b>UR: Get Free Leased Line</b>	
<b>Current Flow:</b>	
<h3>Detailed Requirement:</h3> <p>The target system should provide the ability to check if a Leased Line Reservation is possible given two phone numbers. The target system shall display the following specific Leased Line parameters, based on the given phone numbers, if a Leased Line is available</p> <ul style="list-style-type: none"> <li>• MIC(s) [zero or more]</li> <li>• DDF(s) [zero or more]</li> <li>• Vertical MDF and MDF Port (connected to the Free Cabinet Primary Port)</li> <li>• Cabinet, a Free Cabinet Primary Port and Cabinet Secondary Port (connected to the Free DP Port)</li> <li>• DP and a Free DP Port</li> </ul> <p>Leased Line availability is defined by having free ports on the DPs of the two locations identified by the input phone numbers.</p> <p><i>Note: The input phone numbers are usually the neighbour numbers on both ends to ensure that the Line Reservation is happening on the correct DP</i></p>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

<b>ID#: BPM-CIM-015</b>	<b>Raised By: -</b>
<b>UR: xDSL Line Reservation Options</b>	
<b>Current Flow:</b>  The CSR can check the technical possibility for a subscription through CRM system based on the nearby phone number, if the technical possibility is available the customer can get a reservation possibility and continue in subscription operation.	
<b>Detailed Requirement:</b>  The target system shall provide the CSR with an option to choose the type of xDSL Line requested prior to checking for a Free xDSL Line. The available options shall be <ul style="list-style-type: none"> <li>• ADSL</li> <li>• GSHDSL</li> </ul> The above options are mutually exclusive and shall be used along with an input phone number to get a Free xDSL Line for reservation	
 <i>Note:</i>	

<b>ID#: BPM-CIM-016</b>	<b>Raised By: -</b>
<b>UR: Get Free ADSL Line</b>	
<b>Current Flow:</b>  The CSR can check the technical possibility for a subscription through CRM system based on the nearby phone number, if the technical possibility is available the customer can get a reservation possibility and continue in subscription operation.	
<b>Detailed Requirement:</b>  Requesting an ADSL line shall have the following pre-requisites: <ul style="list-style-type: none"> <li>• An existing Telephony Line is used for ADSL Line.</li> <li>• The provided Telephony Line phone number belongs to the requestor.</li> <li>• The corresponding DP and Cabinet primary ports are not on a multiplexer.</li> </ul> Target system shall apply the following logic to perform ADSL subscription.  If the corresponding Line Type is PSTN, ISDN or PES with MSAN Type PSTN and a ADSL Line is available (free ports available on a DSLAM belonging to the same Exchange), the following information are retrieved: <ol style="list-style-type: none"> <li>I. Vertical MDF and MDF Port</li> </ol>	




Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

- II. Cabinet, Cabinet Primary Port and Cabinet Secondary Port
- III. DP and DP Port
- IV. A Free DSLAM and a Free DSLAM Port along with the account number associated to the Free DSLAM Port
- V. DSLAM OMC (If available)

If the corresponding Line Type is PES with MSAN Type Combo, the following information are retrieved:

- Vertical MDF and MDF Port
- Cabinet, Cabinet Primary Port and Cabinet Secondary Port
- DP and DP Port
- MSAN EID and MSAN TID along with the account number associated to the MSAN TID
- The user should NOT be able to change the DSLAM port.

 *Note: Related to Requirement 'DP or Primary Port on Multiplexer'*

<b>ID#: BPM-CIM-017</b>	<b>Raised By: -</b>
<b>UR: Get Free GSHDSL Line</b>	
<b>Current Flow:</b>  The CSR can check the technical possibility for a subscription through CRM system based on the nearby phone number, if the technical possibility is available the customer can get a reservation possibility and continue in subscription operation.	
<b>Detailed Requirement:</b>  Target system shall apply the below logic when the Telephony Line phone number belongs to the requestor but the corresponding DP port is on a multiplexer or the Telephony Line phone number does not belong to the requestor.  If the corresponding Line Type is PSTN or ISDN or PES with MSAN Type PSTN and a GSHDSL Line is available (free ports available on a DSLAM belonging to the same Exchange) <ul style="list-style-type: none"> <li>• Vertical MDF and MDF Port (connected to the Free Cabinet Primary Port)</li> <li>• Cabinet, a Free Cabinet Primary Port and Cabinet Secondary Port (connected to the Free DP Port)</li> <li>• DP and a Free DP Port</li> <li>• A Free DSLAM and a Free DSLAM Port along with the account number associated to the Free DSLAM Port</li> <li>• DSLAM OMC (If available)</li> </ul>	

Prepared (Subject resp)		No.		
Marwan Khoury		1029-FCP 132 1747		
Approved (Document resp)	Checked	Date	Rev	Reference
Ziad Hobeika		2018-07-10	D	

If the corresponding Line Type is PES with MSAN Type Combo and a GSHDSL Line is available (free ports available on MSAN belonging to the same Exchange)

- Vertical MDF and MDF Port (connected to the Free Cabinet Primary Port)
- Cabinet, a Free Cabinet Primary Port and Cabinet Secondary Port (connected to the Free DP Port)
- DP and a Free DP Port
- MSAN EID and a Free MSAN TID along with the account number associated to the Free MSAN TID

*Note: Related to Requirement 'DP or Primary Port on Multiplexer'. Furthermore, a GSHDL can't coexist with PSTN, therefore, a new DSL Line must be used.*


<b>ID#: BPM-CIM-018</b>	<b>Raised By: -</b>
<b>UR: Get Free DP Ports</b>	
<b>Current Flow:</b>  CRM can ask inventory system to suggest free reservations for the subscription based on the technical reservation possibility, the suggested reservation should cover Switch-MDF-Cabinet-DP-Secondary-Primary. The CSR can change the suggested reservations (DP and Cabinet) based on his knowledge and the free reservations, then CSR can apply a temporary reservation on the free suggested reservations based on the provided inventory APIs.	
<b>Detailed Requirement:</b>  The target system should provide the possibility to list available DP ports on a given DP. This option shall only be possible during contract creation and when applicable. Choosing a specific port from the list will automatically update the Line Reservation parameters displayed in CRM.	
<i>Note:</i>	

<b>ID#: BPM-CIM-019</b>	<b>Raised By: -</b>
<b>UR: Get Free WCDMA Receiver Ports</b>	
<b>Current Flow:</b>  N/A	
<b>Detailed Requirement:</b>  The target system should provide the possibility to list free WCDMA receiver ports on a given WCDMA receiver. This option shall only be possible during contract creation and when applicable. Choosing a specific port from the list will	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

automatically update the WCDMA Line Reservation parameters displayed in CRM.

 *Note:*

<b>ID#: BPM-CIM-020</b>	<b>Raised By: -</b>
<b>UR: Get Free Phone Numbers</b>	
<b>Current Flow:</b>  CRM displays a list of free numbers based on phone type and switch name, CRM provides the possibility to choose a free phone number for temporary reservation, phone number statuses in CCBS (inventory) are: Free, Temporary reserved, Faulty, blocked (temporary status for line moving), DSR temporary status for deported numbers, and Active.	
<b>Detailed Requirement:</b>  The target system should provide the possibility to retrieve free Telephony (PSTN/WCDMA/ISDN/DID/PES) phone numbers. <ul style="list-style-type: none"> <li>If the listing is for PSTN, WCDMA or PES, specific classification (bronze, silver, gold) on a given Switch or MGW can be requested.</li> <li>If the listing is for DID, specific DID length (DIDX, DIDC, DIDM) on a given Switch can be requested.</li> </ul> Retrieving free phone numbers shall only be possible after retrieval of a free Telephony Line of the requested type.	
 <i>Note:</i>	

<b>ID#: BPM-CIM-021</b>	<b>Raised By: -</b>
<b>UR: Line Description Document</b>	
<b>Current Flow:</b>  CRM provides the ability to generate a document in case no technical possibility for reservation in customer CSO, this document can't be printed if there is a technical possibility, this document counts on the nearby phone number to check in the inventory system, by this document the customer will be certain that the technical possibility is not available.	
<b>Detailed Requirement:</b>  System shall give the ability to generate the Line Description document only in case a Line Reservation is not possible.	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

<i>Note: This document proves to the customer that the line reservation is not available. He can use it as a proof that a line subscription is currently unavailable in his location.</i>	


<b>ID#: BPM-CIM-022</b>	<b>Raised By: -</b>
<b>UR: Deposit Payment for Waiting List Option</b>	
<b>Current Flow:</b>  The CSR can add the request to the waiting list if no available technical possibility, the customer should pay a deposit amount to enter the waiting list queue, the CSR can continue the subscription when the technical possibility is available and the deposit amount will be processed as a part of subscription fee.	
<b>Detailed Requirement:</b>  Target system shall provide the CSR with an operation that allows the customer to be added to a waiting list and will only be available in case a Line Reservation was not possible. This operation shall provide the CSR with a unique Deposit ID that the customer will use when paying the deposit. A payment deposit of a customer who is to be added to the waiting list can only be done in cash. A waiting list subscription can only be resumed from a CSR with Cashier	
<i>Note:</i>	


<b>ID#: BPM-CIM-023</b>	<b>Raised By: -</b>
<b>UR: Add to Waiting List Feature</b>	
<b>Current Flow:</b>  The CSR can add the request to the waiting list if no available technical possibility, the customer should pay a deposit amount to enter the waiting list queue, the CSR can continue the subscription when the technical possibility is available and the deposit amount will be processed as a part of subscription fee.	
<b>Detailed Requirement:</b>  Target system should provide the possibility to add a subscription request to waiting list.	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

This option shall only be possible in case a Line Reservation is not possible.  
The waiting list shall include the following attributes:

- a. Customer name
- b. Customer address
- c. Linepath.Switch
- d. Linepath.MDF
- e. Linepath.Cabinet.Primary
- f. Linepath.Cabinet.Secondary
- g. Linepath.DP

 Note:

<b>ID#: BPM-CIM-024</b>	<b>Raised By: -</b>
<b>UR: Remove Prospect from Waiting List</b>	
<b>Current Flow:</b>  The CSR can add the request to the waiting list if technical possibility is not available, the customer should pay a deposit amount to enter the waiting list queue, the CSR can continue the subscription when the technical possibility is available, and the deposit amount will be processed as a part of subscription fee.	
<b>Detailed Requirement:</b>  Target system shall provide the ability to explicitly (based on customer's request) or implicitly (when the subscription is resumed) remove a customer's pending subscription from waiting list	
 Note:	

<b>ID#: BPM-CIM-025</b>	<b>Raised By: -</b>
<b>UR: Reserve Line Path</b>	
<b>Current Flow:</b>  CRM can ask inventory system to suggest free reservations for the subscription based on the technical reservation possibility, the suggested reservation should cover Switch-MDF-Cabinet-DP-Secondary-Primary, the CSR can change the suggested reservations (DP and Cabinet) based on his knowledge and the free reservations, then CSR can apply a temporary reservation on the free suggested reservations based on the provided inventory APIs.	
<b>Detailed Requirement:</b>	


Prepared (Subject resp)		No.		
Marwan Khoury		1029-FCP 132 1747		
Approved (Document resp)	Checked	Date	Rev	Reference
Ziad Hobeika		2018-07-10	D	

Target system shall allow reservation of the Line consisting of:

- The corresponding parameters depending on the Line and the Line Type
- The selected free phone number in case of PSTN/PES/ISDN/WCDMA
- The selected range of phone number in case of DID
- Device ID (optionally)
- Vertical MDF and MDF Port (connected to the Free Cabinet Primary Port)
- Cabinet, a Free Cabinet Primary Port and Cabinet Secondary Port (connected to the Free DP Port)
- DP and Free DP Port

On successful reservation, XAKTA shall return a Line Path Id that is saved on CRM until the work flow is completed.

 Note:

<b>ID#: BPM-CIM-026</b>	<b>Raised By: -</b>
<b>UR: Rate Plan Selection</b>	
<b>Current Flow:</b>  CRM has a list of customers' categories that are defined in BSCS and defined again in CRM system, CRM filters the allowed rate plans for the subscription based on customer category, while dunning module counts on customer's category to exclude the customer from dunning module.	
<b>Detailed Requirement:</b>  Target system shall provide the CSR with the possibility to select one of the Rate Plans available for a given Customer Group and Contract Type.	
 Note:	

<b>ID#: BPM-CIM-027</b>	<b>Raised By: -</b>
<b>UR: Services Selection</b>	
<b>Current Flow:</b>  CRM displays a list of services to activate on the contract (subscription), the list counts on selected rate plan and switch type, the core services in the rate plan will be selected automatically, if any of the selected services needs a parameter CRM should notify the CSR to determine the parameter, CRM validates the selected services if they are conflicted then CRM notifies the CSR and stopes the process, the list of services are defined in billing system and they are replicated to CRM system.	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

<b>Detailed Requirement:</b>  Target system shall allow CSR to add services to a contract's rate plan. The core services will automatically be added to the contract and system shall prevent the CSR from removing them. ADSL Service selection shall only be available only in case there was a possibility of ADSL Service Reservation.	
<i>Note:</i>	

<b>ID#: BPM-CIM-028</b>	<b>Raised By: -</b>
<b>UR: Check Service Parameters</b>	
<b>Current Flow:</b>  CRM displays a list of services to activate on the contract (subscription), the list counts on selected rate plan and switch type, the core services in the rate plan will be selected automatically, if any of the selected services needs a parameter CRM should notify the CSR to determine the parameter, CRM validates the selected services if they are conflicted then CRM notifies the CSR and stops the process, the list of services are defined in billing system and they are replicated to CRM system.	
<b>Detailed Requirement:</b>  Target system shall notify CSR if mandatory service parameters were not filled.	
<i>Note:</i>	

<b>ID#: BPM-CIM-029</b>	<b>Raised By: -</b>
<b>UR: Check Services Consistency</b>	
<b>Current Flow:</b>  CRM displays a list of services to activate on the contract (subscription), the list counts on selected rate plan and switch type, the core services in the rate plan will be selected automatically, if any of the selected services needs a parameter CRM should notify the CSR to determine the parameter, CRM validates the selected services if they are conflicted then CRM notifies the CSR and stops the process, the list of services are defined in billing system and they are replicated to CRM system.	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

**Detailed Requirement:**

Target system must not allow CSR to activate conflicting services on a given contract.


 Note:

**ID#: BPM-CIM-030****Raised By: -****UR: Check Services Availability****Current Flow:**

CRM allows the CSR to select services for activation on a contract, CRM validates the consistency between the selected services or even selected services and already active ones, and the service is available on the contract's switch.

**Detailed Requirement:**

Target system must not allow CSR to activate a service that is not supported on the contract's serving network element.


 Note:

**ID#: BPM-CIM-031****Raised By: -****UR: Evaluate Subscription Fees****Current Flow:**

CRM calculates the subscription fee for payment based on the subscription fee service which is a core service in the normal customer rate plan, CRM calculates the subscription fees for payment while payments system reads it from CRM if the customer option was to pay the subscription payment in advance, CRM gives the CSR the ability to update the subscription fee.

**Detailed Requirement:**


Target system shall evaluate the subscription fee based on the chosen services.

 Note:

**ID#: BPM-CIM-032****Raised By: -**



Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

UR: Fees Payment Method
<p><b>Current Flow:</b></p> <p>CRM provides options to the CSR to choose if the subscription fee is collected in advance through payments system, then that fee is posted as a deposit till subscription completion which turns the deposit to a credit, the other option is to calculate the subscription fee on the invoice.</p>
<p><b>Detailed Requirement:</b></p> <p>The target system shall allow specific CRM group to choose the subscription or operation fees payment method, which will be one of the followings:</p> <ul style="list-style-type: none"> <li>• Cash</li> <li>• Over invoice</li> </ul> <p>In case the CRM user (CSR) is not part of this group and the CSO have cashier and the customer is not official, the payment will automatically be sent to cash.</p> <p>In case the CSO does not have a cashier, the payment will automatically be sent over invoice.</p> <p>The non-core services, to which the subscriber chooses to subscribe during the contract creation, are always paid over invoice.</p> <p> <i>Note:</i></p>

ID#: BPM-CIM-033	Raised By: -
UR: Insurance Deposit Amount	
<p><b>Current Flow:</b></p> <p>ST foreign customers should pay a deposit amount to be able to make a new subscription; web payment application provides such option to put that amount in the customer account, this amount will not be transferred to the customer balance when a new invoice issued.</p> <p>Customer deposit payment can be refunded if the foreign customer pays all his invoices and requested a contract deactivation, ST users use Account Receivable application to refund the deposit payment.</p>	
<p><b>Detailed Requirement:</b></p> <p>Target system shall provide the CSR the option to indicate whether a non-Syrian customer chooses to pay deposit or to select a sponsor.</p> <p>The amount of the deposit amount will be globally configurable depending on call barring service status on the contract.</p>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

The following rules are currently applied and will be maintained:

1. If international call barring service is active then the amount is set to SYP15000.
2. if international call barring service is inactive then the amount is set to SYP75000.


 *Note:*


<b>ID#: BPM-CIM-034</b>	<b>Raised By: -</b>
<b>UR: Create Telephony Contract Order</b>	
<b>Current Flow:</b>  CRM provides the ability for the CSR (or DP team sometimes) to send the request to order manager, after the request attributes are filled.	
<b>Detailed Requirement:</b>  The target system shall allow the CSR to submit a Create Contract Order. Initially, the status of the contract shall be 'On Hold' until all work orders related to the contract are completed and the contract is activated by the CSR. <ol style="list-style-type: none"> <li>I. During contract creation work-order, MDF/Cabinet/DP teams are allowed by CRM to change port reservation as follows: <ol style="list-style-type: none"> <li>1. The MDF team, Cabinet team or DP team will have the possibility to update the reservation by choosing a different port as well as the reason why the change was done.</li> <li>2. The list of ports available for the teams to choose from will depend on their status. Once the team choose the port, he will go to the next step <ol style="list-style-type: none"> <li>a. If the team changed the port, the next step will be to specify the reason a new port was chosen. Team will have either "Faulty" or "Other" reasons to choose from. <ol style="list-style-type: none"> <li>i. In case the reason was "Other", the CRM send a change reservation to XAKTA and send the work order to the next team.</li> <li>ii. In case the reason was "Faulty", CRM update the status of the previously reserved port on XAKTA, send a change reservation to XAKTA and send the work order to the next team</li> </ol> </li> <li>b. If the team confirms the reservation as it is, the work order will go to the next team.</li> </ol> </li> </ol> </li> <li>II. When the installation team complete their work, the request is routed back to MDF team where Test Line, Test Device and Line Status commands shall be available. MDF team may change the reservation in case the diagnostic failed for some reason, in that case, a change reservation process is initiated.</li> </ol>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

For telephony, contracts are created in billing system prior to sending requests to fulfilment.

 *Note:*

<b>ID#: BPM-CIM-035</b>	<b>Raised By: -</b>
<b>UR: Submit Activate Contract Order</b>	
<b>Current Flow:</b>  CRM provides the ability for the CSR (or DP team sometimes) to send the request to order manager, after the request attributes are filled.	
<b>Detailed Requirement:</b>  The target system shall allow the CSR to submit an Activate Contract Order when all work orders related to the contract are completed.	
 <i>Note:</i>	

<b>ID#: BPM-CIM-036</b>	<b>Raised By: -</b>
<b>UR: Create PBX Line Service</b>	
<b>Current Flow:</b>  The current treatment of the PBX is not clear	
<b>Detailed Requirement:</b>  The target system shall offer the possibility to create a PBX Service on customer's existing Telephony Contracts of type PSTN or ISDN. A PBX service can only be created on Lines (at least 2) of the same type. The CSR shall be allowed to choose the master PBX number and the slave Telephony numbers. CSR will have the option to choose the allowed actions on each of the master(pilot) and slave numbers. Each slave number will be either allowed to make calls, receive calls or both.	
 <i>Note:</i>	

<b>ID#: BPM-CIM-037</b>	<b>Raised By: -</b>
<b>UR: PBX Line Service Adding</b>	


Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference


**Current Flow:**

The current treatment of the PBX is not clear

**Detailed Requirement:**

Target system shall provide the CSR with the possibility to add new secondary lines to an existing PBX Line Service.  
This option shall not be possible in case the customer has a positive balance

 *Note:*


<b>ID#: BPM-CIM-038</b>	<b>Raised By: -</b>
<b>UR: PBX Line Service Deletion</b>	
<b>Current Flow:</b>  The current treatment of the PBX is not clear	
<b>Detailed Requirement:</b>  Target system shall provide the CSR with the capability to remove a line from a PBX Line Service. If the chosen line for removal is the master phone number, PBX Line Service will be removed from the secondary phone numbers as well. CSR will be alerted in case the chosen PBX Line Service for removal is the master phone number.	
 <i>Note:</i>	

<b>ID#: BPM-CIM-039</b>	<b>Raised By: -</b>
<b>UR: Supported Telephony Line Operations</b>	
<b>Current Flow:</b>  Line Operations are sometimes handled as services	
<b>Detailed Requirement:</b>  Target system shall support the following Telephony Line operations: <ul style="list-style-type: none"> <li>• Create Contract</li> <li>• Line Termination</li> <li>• Change Phone Number</li> <li>• Technical Complaint</li> </ul>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

- Administrative Complaint
- Line Moving
- Add/Subscribe to Service
- Remove/Unsubscribe from Service
- Line Blocking
- Line Unblocking
- Deport Number
- Contract Takeover
- Change Rate Plan
- Request Call Details
- Bill on demand

 Note:

<b>ID#: BPM-CIM-040</b>	<b>Raised By: -</b>
<b>UR: Supported Leased Line Operations</b>	
<b>Current Flow:</b>  Line Operations are sometimes handled as services	
<b>Detailed Requirement:</b>  Target system shall support the following customer's request: <ul style="list-style-type: none"> <li>• Bill on Demand</li> <li>• Contract Creation</li> <li>• Leased Line Moving</li> <li>• Leased Line Termination</li> </ul>	
 Note:	

<b>ID#: BPM-CIM-041</b>	<b>Raised By: -</b>
<b>UR: Supported ADSL Line Customer requests</b>	
<b>Current Flow:</b>  Line Operations are sometimes handled as services	
<b>Detailed Requirement:</b>  Target system shall support the following customer's request: <ul style="list-style-type: none"> <li>• Contract creation</li> </ul>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

- ADSL Suspension
- ADSL Activation
- Change ADSL port [1]
- Change ADSL password
- Bill on Demand
- ADSL Line Termination
- Contract takeover
- Change username [2]
- ADSL Line Moving
- Move ADSL contract line port

*Note: [1] Request could be initiated by the PDN team and not the CSR.  
[2] Request takes part of the ADSL contract takeover and not initiated by the customer.*

<b>ID#: BPM-CIM-042</b>	<b>Raised By: -</b>
<b>UR: Supported Fibre Operations</b>	
<b>Current Flow:</b>  N/A	
<b>Detailed Requirement:</b>  Target system shall support the following customer's request: <ul style="list-style-type: none"> <li>• Create contract</li> <li>• Terminate contract</li> <li>• Bill on Demand</li> </ul>	
<i>Note:</i>	

<b>ID#: BPM-CIM-043</b>	<b>Raised By:</b>
<b>UR: Restricting Line Actions</b>	
<b>Current Flow:</b>  CRM validate the customer balance before any new operation, the operation will not be started till the customer pays all his invoices	
<b>Detailed Requirement:</b>  Target system shall prevent the CSR from <ul style="list-style-type: none"> <li>• Performing Telephony Line Operations</li> </ul>	


Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

- Adding PBX Line Service
- Adding ADSL Service

on a customer contract if the customer balance is positive or the contract is not active. However, adding or deleting other Telephony Line Services shall be allowed.

An exception to the balance rule is when the contact sub-type is ST internal (special ST employee) or Official or the operation is tagged as advantageous. Also when the customer wishes to de-activates his ADSL subscription, the balance rule is overridden.

 Note:

<b>ID#: BPM-CIM-044</b>	<b>Raised By: -</b>
<b>UR: Restricting Telephony Line Operations</b>	
<b>Current Flow:</b>  CRM checks the under processing or pending processes on a selected phone number, then CRM will not allow any new operation on that phone number till the under processing/pending processes are finished.	
<b>Detailed Requirement:</b>  Target system shall not allow the CSR to execute a Telephony Line Operation on a phone number if one of the below points is verified: <ul style="list-style-type: none"> <li>• There is an existing Telephony Line Operation on the same phone number in status Open</li> <li>• There is an existing Telephony Line Operation on the same phone number in status Under Processing</li> <li>• Line is Blocked</li> <li>• The number belongs to a PBX series and any number in the series has an Open or UP line operation</li> <li>• Line is Suspended</li> </ul>	
 Note:	

<b>ID#: BPM-CIM-045</b>	<b>Raised By:</b>
<b>UR: Advantageous Scenarios</b>	
<b>Current Flow:</b>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

CRM provides the ability for the CSR to define the telephony operation as an advantageous operation, CRM will not validate the customer balance before the operation and will not calculate fees over that operation.

### Detailed Requirement:

Advantageous possibility will be available for operations and installation fees only.

The advantageous operations allow the CSR to:

- Perform an operation on the contract or subscribe the customer to a new contract even if the customer has an open amount.
- The installation or operation fees are considered free.

#### Scenario 1:

If the customer has an open amount and CSR attempts a new subscription, system shall notify the user whether he would like to proceed in advantageous subscription. In case CSR confirms, the new contract creation shall be allowed, and the installation fees will be free of charge. The customer must pay the subscription fees.

#### Scenario 2:

If the customer has an open amount and CSR selects an existing contract and attempts an operation, system shall notify the user whether he would like to proceed in advantageous operation. In case CSR confirms, the operation will be free of charge. Also, if the operation is **Contract Takeover** or **Contract Termination**, Bill On Demand shall be excluded from the process.


 Note:


<b>ID#: BPM-CIM-046</b>	<b>Raised By: -</b>
<b>UR: Check Customer Service Registry</b>	
<b>Current Flow:</b>  CRM provides the ability to extract and display the contract information: ID, rate plan, active/deactivated services, activation/deactivation dates for contract or services.	
<b>Detailed Requirement:</b>  Target system shall provide the possibility to check the customer service registry consisting of the below information: <ul style="list-style-type: none"> <li>a) Contract ID.</li> <li>b) Contract rate plan.</li> </ul>	




Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

- c) Contract activation/deactivation date.
- d) Activated/Deactivated services.
- e) Services activation/deactivation dates.
- f) Contract status

 *Note:*

<b>ID#: BPM-CIM-047</b>	<b>Raised By: -</b>
<b>UR: Submit Activate Service Order</b>	
<b>Current Flow:</b>  CRM allows the CSR to select services for activation on a contract, CRM validates the consistency between the selected services or even selected services and already active ones, and the service is available on the contract's switch.	
<b>Detailed Requirement:</b>  Target system shall allow CSR to activate services on a selected contract. The CSR can either select one service or multiple services to activate.	
 <i>Note:</i>	

<b>ID#: BPM-CIM-048</b>	<b>Raised By: -</b>
<b>UR: Submit Deactivate Service Order</b>	
<b>Current Flow:</b>  CRM allows the CSR to select active services for deactivation on a contract, CRM build the deactivation request to be processed on other systems (billing & provisioning).	
<b>Detailed Requirement:</b>  Target system shall allow CSR to deactivate services on a selected contract.	
 <i>Note:</i>	

<b>ID#: BPM-CIM-049</b>	<b>Raised By: -</b>
<b>UR: Submit Line Blocking Order</b>	
<b>Current Flow:</b>	


Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

CRM provides the ability to CSR to block a phone number based on official decision, CRM asks the CSR to attach the official document.  
CRM blocks the contract then no telephony operation can be applied on that contract using CRM.

#### **Detailed Requirement:**

Target system shall provide CSR with an option to block a phone number based on official decision.  
The Line Blocking Order is acquired by the CSR in form of official document.  
Verification of the authenticity of the proof document shall be done manually by the CSR and does not involve actions in CCBS system.

 *Note:*

<b>ID#: BPM-CIM-050</b>	<b>Raised By: -</b>
<b>UR: Submit Line Unblocking Order</b>	
<b>Current Flow:</b>  CRM provides the ability to CSR to unblock a blocked phone number based on official decision, CRM asks the CSR to attach the official document. CRM unblock the contract then telephony operation can be applied on that contract again using CRM.	
<b>Detailed Requirement:</b>  Target system shall provide CSR with an option to unblock a phone number based on official decision. The Line Unblocking Order is acquired by the CSR in form of official document. Verification of the authenticity of the proof document shall be done manually by the CSR and does not involve actions in CCBS system	
 <i>Note:</i>	


<b>ID#: BPM-CIM-052</b>	<b>Raised By: -</b>
<b>UR: Submit Bill on Demand Order</b>	
<b>Current Flow:</b>  CRM allows to make direct bill for the customer, this invoice will be generated direct and out of bill cycle time, CRM will insert a billing request in billing system,	


Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

then BCH will handle it, CRM assigns two actions: generate invoice which is an API from billing to insert the billing request in billing system, get invoice which get the billing request status.

#### Detailed Requirement:

Target system should provide the CSR with the possibility to bill the customer based on his request.

 Note:

<b>ID#: BPM-CIM-053</b>	<b>Raised By: -</b>
<b>UR: Request Call Details</b>	
<b>Current Flow:</b>  CRM provides the ability to print a call details for a contract for a maximum of 6 months with a financial charge calculated on the next bill cycle.	
<b>Detailed Requirement:</b>  Target system shall provide the CSR with a possibility to retrieve call details for any contract. Charges fee – depending on the range of generate pages - shall incur and should be paid by the customer either by cash or over invoice before generating the call details as per below logic: <ol style="list-style-type: none"> <li>1. In case cashier is available in CSO, CSR asks the customer to pay the operation fee at the cashier. Once payment completed, customer receives the printed call details from CSR.</li> <li>2. In case cashier is not available in CSO, charges for call details shall be posted as OCC and CSR print the call details.</li> </ol> The input for call details period is the customer bill cycle for the selected contract. ST daily operation team should make sure that the free disk space does not fall below 30% when the platforms become in production mode. That is to prevent unwanted service disturbances related to disk space	
 Note:	

<b>ID#: BPM-CIM-054</b>	<b>Raised By: -</b>
<b>UR: Submit Change Rate Plan Order</b>	
<b>Current Flow:</b>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference


CRM provides the ability to CSR to choose active contract for change rate plan, the CSR can choose the new rate plan.  
CRM notifies the CSR if any of active services on the contract is not exist on the new rate plan.

#### **Detailed Requirement:**

Target system shall allow CSR to select a new rate plan for the customer's contract based on the allowed rate plans according to his customer group.  
The system shall notify the CSR if the services available on the new rate plan does not match the services available on the old rate plan.

- If the new rate plan contains less services than the old one, the Services to be deactivated table lists all services that will be deactivated after the rate plan change.
- If the new rate plan contains more core services than the old one, these are listed in the Services to be activated table and will be activated in addition after the rate plan change.

The CSR can either abort the change or proceed with change of the rate plan. In the latter case, all mandatory resources and parameters must be assigned into the contracted Service before CSR can submit the change rate plan order.

 *Note:*

<b>ID#: BPM-CIM-055</b>	<b>Raised By: -</b>
<b>UR: Submit Change Phone Number Order</b>	
<b>Current Flow:</b>  CRM allows the CSR to start the change customer phone number scenario to be passed through the following scenarios: <ul style="list-style-type: none"> <li>a) Technical Reservation.</li> <li>b) Booking Free Phone Number.</li> <li>c) Get Meter: for the new phone number.</li> <li>d) Generate Meter: for the old phone number.</li> <li>e) Test Tone: on the new phone number.</li> <li>f) Release (old) Phone Number in MDF.</li> <li>g) Plug (new) Phone Number in MDF.</li> <li>h) Event Service Internally Addition.</li> <li>i) Send Request to Order Manager.</li> </ul>	
<b>Detailed Requirement:</b>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

Target system shall provide the CSR with the possibility to change the phone number of a specific customer contract. The possible new numbers to choose from depends on the switch to which the original phone number belongs as well as the number class chosen by the CSR.


A defined fee for the Change Phone Number operation will be visible to the CSR before submitting the order. This fee shall be posted to customer's bill as charges upon execution.

If the new phone number is available on a different switch than the old phone number, the line path should be updated on inventory and a work-order should be sent to switch team to perform the configuration on the new switch.

If ADSL is available on the telephony line then the following logic applies :

- If the new phone number is within the same switch, a work-order is sent to the MDF team to perform jumpering.
- If the new phone number is in another switch, a new port in the DSLAM shall be reserved, a workorder to remove the old connection in the old switch, relaying the line in the new switch.
  - If there is no DSLAM port in the new switch, CSR informs the customer to cancel ADSL subscription before proceeding.

In case the new phone number is of different telephony category, i.e new phone number belongs to ISDN range and old phone number belongs to PSTN range, target system shall include change rate plan order in the change phone number operation.

 *Note:*

<b>ID#: BPM-CIM-056</b>	<b>Raised By: -</b>
<b>UR: Submit Contract Takeover Order</b>	
<b>Current Flow:</b>  CRM allows the CSR to start change owner process to be passed through the following scenarios: <ol style="list-style-type: none"> <li>a) If the new customer is not existing in the system, then use scenario: Private Syrian Customer.</li> <li>b) CRM should provide the CSR to flag the operation if it is done by the two customers in CSO or only new customer with 4 paid invoices.</li> <li>c) Get Meter.</li> <li>d) Event Service internally addition on the old owner.</li> <li>e) Bill on Demand.</li> <li>f) The customer pays the invoice.</li> <li>g) CRM provides the ability to point to the new customer.</li> </ol>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

h) Generate Change Owner contract template

### Detailed Requirement:

Target system shall provide the CSR with the possibility to initiate a contract takeover between two customers leading to a change of contract's owner. The CSR shall

1. Choose the new owner from the list of existing customers in the system.
2. Choose the proof type
  - a. Direct where both parties are present, and their identities verified by the CSR
  - b. Indirect where the contract owner is absent, and the new owner presents the last 4 bills as a proof of settlement. In this case, CSR can't continue with the contact take-over without attaching the 4 bills. The authenticity of the proof document shall be verified manually by the CSR.
3. Submit a Bill on Demand Order to generate a bill to date. This bill must be paid in cash by any of the parties involved in the contract takeover.
  - a. In case the contract takeover is carried out for an official customer, Bill on Demand order must be optional. In that case, the open amount related to this contract remains unpaid.
4. If an ADSL contract is linked to the telephony contract:
  - a. CRM notifies the CSR that the ADSL contract will automatically be taken over if it is not cancelled.
  - b. If the new owner wants to subscribe to ADSL, two payments related to two operations (Contract takeover and ADSL contract takeover) should be added as service sale for cash or fees in case of payment over invoice.
    - i. Two separate requests shall be inserted by CRM as a service sale and given to the customer as a reference.
  - c. If the new owner doesn't want ADSL subscription, CSR should deactivate the ADSL contract prior to telephony contract takeover.
5. Generate Change Owner contract template
6. Submit Contract Takeover Order

A defined fee for the Contract Takeover operation will be visible to the CSR before submitting the order. This fee shall be posted to new contract owner's bill as charges upon execution by CSR.

*Note:*

<b>ID#: BPM-CIM-057</b>	<b>Raised By: -</b>
<b>UR: Line Moving in same Switch</b>	
<b>Current Flow:</b>	

Prepared (Subject resp)		No.		
Marwan Khoury		1029-FCP 132 1747		
Approved (Document resp)	Checked	Date	Rev	Reference
Ziad Hobeika		2018-07-10	D	

CRM allows the CSR to start line moving same switch scenario to be passed through the following scenarios:

- a) Reservation possibility.
- b) Apply technical reservation.
- c) If the primary is changed then Plug the phone number in MDF
- d) If the primary is changed then Release phone number in MDF.
- e) If Cabinet is changed Plug the reservation in Cabinet
- f) If Cabinet is changed Release the reservation in Cabinet
- g) Plug the connection in DP.
- h) Release the connection in DP.
- i) Send Request to Order Manager.
- j) Fill Cable Length.


#### Detailed Requirement:

Target system shall provide the CSR with the possibility to initiate an order to change a specific line from one location to another. The CSR shall ask for a nearby phone number and check the possibility of telephony line reservation.

The new and old telephony lines are served by the same switch, hence the CSR shall proceed with reserving the line path using the same Switch Device ID/MGW Port. The same phone number shall be maintained and a defined fee for the Line Moving operation will be visible to the CSR before submitting the order. This fee shall be posted to customer's bill as charges upon execution.

If customer has an ADSL contract linked to this telephony line, BPM shall post a work-order to MDF team to jumper the new port, knowing that the DSLAM port of the line will not change.

In some cases, the MDF port might be different based on the new customer address, therefore the workflow shall include request to MDF/Switch team to change MDF port for this number.

 Note:

<b>ID#: BPM-CIM-058</b>	<b>Raised By: -</b>
<b>UR: Submit Deport Number Order</b>	
<b>Current Flow:</b>	
Using the nearby phone number CRM can validate the possibility to deport a number to the new switch based on Inventory API (#Reservation Possibility), Using Inventory system GUI, inventory team can plan the connection while CRM reads that planned connection from inventory and ask the corresponding teams	

Prepared (Subject resp)		No.		
Marwan Khoury		1029-FCP 132 1747		
Approved (Document resp)	Checked	Date	Rev	Reference
Ziad Hobeika		2018-07-10	D	

to apply the needed cabling (MIC, MDF, Cabinet & DP) in the new switch with releasing the cabling in the old switch.

#### Detailed Requirement:


Target system shall provide the CSR with the possibility to initiate an order to move a specific phone number from one location to another. The CSR shall check for the possibility of telephony line reservation using a nearby phone number in the new location and proceed with reserving the line path consisting of

- New Location DP and Free DP Port
- New Location Cabinet and New Location Free Cabinet Ports
- New Location MDF and MIC
- Old Location MIC and MDF
- Old Location Switch and Switch Device ID

The same phone number shall be maintained and an additional service (DFC) shall be added to the customer's contract upon completion of the work order. The operation fee shall be billed based on the number of MICs. The number is set by the Technical Team as part of the workflow. The CSR updates the operation cost afterwards.


An additional recurring service with access fee will be added to the subscriber contract.


 Note:

<b>ID#: BPM-CIM-059</b>	<b>Raised By: -</b>
<b>UR: Friends and Family Management</b>	
<b>Current Flow:</b>	
N/A	
<b>Detailed Requirement:</b>	
Target system shall offer the CSR the possibility to define Friends and Family on an existing telephony contract.	
CSR shall be able to add up to 10 number of phone numbers as specific destinations and input a percentage to indicate the amount the customer should pay from the service's full usage charges.	
Phone calls made by the phone number of the chosen telephony contract to any of the specified destinations shall be subject to the percentile logic stated above.	
 Note:	



Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

<b>ID#: BPM-CIM-060</b>	<b>Raised By: -</b>
<b>UR: ADSL subscription add to waiting list</b>	
<b>Current Flow:</b>  N/A	
<b>Detailed Requirement:</b>  Target system should provide the possibility to add an ADSL subscription request to waiting list. This option shall only be allowed in case an ADSL contract subscription is not possible due to a technical limitation (i.e. no free DSLAM port available) No need to pay a deposit amount to be included in the ADSL waiting list. The customer shall automatically be removed from ADSL waiting list when he is subscribed to ADSL contract or ADSL service through another ISP.	
 <i>Note:</i>	


<b>ID#: BPM-CIM-061</b>	<b>Raised By: -</b>
<b>UR: ADSL Alter Speed</b>	
<b>Current Flow:</b>  N/A	
<b>Detailed Requirement:</b>  Target system shall provide the CSR with the possibility to alter ADSL speed.	
 <i>Note:</i>	


<b>ID#: BPM-CIM-062</b>	<b>Raised By: -</b>
<b>UR: ADSL Alter Speed Fee</b>	
<b>Current Flow:</b>  N/A	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

**Detailed Requirement:**

Target system must automatically add one-time event fees to the subscriber bill when the ADSL speed is downgraded.


 Note:


<b>ID#: BPM-CIM-063</b>	<b>Raised By: -</b>
<b>UR: Switch tagged under waiting list</b>	
<b>Current Flow:</b>  N/A	
<b>Detailed Requirement:</b>  Target system should not allow any new request to be added to waiting list in case the switch related to the new request is already available inside the waiting list items.	
 Note:	

<b>ID#: BPM-CIM-064</b>	<b>Raised By: -</b>
<b>UR: ADSL Print Reservation Document</b>	
<b>Current Flow:</b>  N/A	
<b>Detailed Requirement:</b>  Target system shall provide the capability to print the reservation information of ADSL service. The reservation information comprises the following: <ul style="list-style-type: none"> <li>a. Reserved Line Path</li> <li>b. ADSL username</li> <li>c. ADSL password</li> <li>d. Customer name</li> <li>e. CSO</li> <li>f. Subscription date</li> <li>g. Service speed</li> <li>h. DSLAM Port name</li> <li>i. Provider of DSLAM port</li> </ul>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

 Note:

<b>ID#: BPM-CIM-065</b>	<b>Raised By: -</b>
<b>UR: Professional services</b>	
<b>Current Flow:</b>  N/A	
<b>Detailed Requirement:</b>  Target system should allow indicating on customer contract information that the owner of the contract offers professional services to the public. This information is displayed on CRM and is utilized by the directory inquiry. The customer requests to subscribe to this CCBS service from CSO. CSR installs a paid directory inquiry service on this customer contract on BSCS.	
 Note:	


<b>ID#: BPM-CIM-066</b>	<b>Raised By: -</b>
<b>UR: Open Balance Check Exceptions</b>	
<b>Current Flow:</b>  N/A	
<b>Detailed Requirement:</b>  Target system shall bypass balance validity rule if the customer type is Official or sub-type is ST Internal (special ST employee) or the operation is advantageous	
 Note:	

<b>ID#: BPM-CIM-067</b>	<b>Raised By: -</b>
<b>UR: ADSL contract takeover</b>	
<b>Current Flow:</b>  N/A	
<b>Detailed Requirement:</b>  Target system shall include capability to Change the ADSL contract owner.	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

The operation will be started in CRM based on customer request.  
 CSR shall terminate the ADSL contract of the current owner.  
 CSR shall initiate ADSL contract subscription for the new owner.  
 The ADSL contract shall be re-linked to the appropriate telephony line by the CSR.  
 The ADSL username and password shall be changed as part of this operation.


 Note:


<b>ID#: BPM-CIM-068</b>	<b>Raised By: -</b>
<b>UR: ADSL Change Password</b>	
<b>Current Flow:</b>  N/A	
<b>Detailed Requirement:</b>  Target system shall allow customer to change his ADSL password. CSR shall initiate ADSL change password operation. The verification of the customer identity for this process is held on CSR responsibility.	
 Note:	


<b>ID#: BPM-CIM-069</b>	<b>Raised By: -</b>
<b>UR: ADSL change port</b>	
<b>Current Flow:</b>  N/A	
<b>Detailed Requirement:</b> This operation can only be initiated by the PDN team after discovering that the port is broken. 1. They initiate a 'change ADSL port' workorder with the reason that the port is broken (automatically indicating that another port should be chosen). BPM will automatically: <ul style="list-style-type: none"> <li>• set the original port to broken state</li> <li>• request a free ADSL port from the spare ports</li> <li>• assigns the free port to the ISP to which the original port belonged</li> <li>• reserve the new line path</li> <li>• send the order to MDF team to switch the connection to new port.</li> </ul> 2. MDF team set the status of the 'change ADSL port' workorder to complete	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

3. BPM update the status of the new ADSL line from reserved to active

 *Note: ADSL Change Port as a separate process will be discussed as part of IPTV/ VoD proposal*

<b>ID#: BPM-CIM-070</b>	<b>Raised By: -</b>
<b>UR: Directory Inquiry</b>	
<b>Current Flow:</b>  N/A	
<b>Detailed Requirement:</b>  Target system shall host information of users for Directory Inquiry service. A free service is applicable for all users by default. If a particular customer would like to be found by means of his/her professional service offering (eg. restaurant, company, lawyer,etc...), a paid subscription is required to ST.	
 <i>Note:</i>	

<b>ID#: BPM-CIM-071</b>	<b>Raised By: -</b>
<b>UR: Directory Inquiry GUI</b>	
<b>Current Flow:</b>  N/A	
<b>Detailed Requirement:</b>  Target system shall provide a GUI page for Directory Inquiry users.	
 <i>Note:</i>	


<b>ID#: BPM-CIM-072</b>	<b>Raised By: -</b>
<b>UR: Resume subscription from waiting list</b>	
<b>Current Flow:</b>  N/A	


Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

**Detailed Requirement:**


In case a customer is already available in waiting list, any new subscription that he/she wants to purchase shall be resumed from the waiting list entry point. CRM shall notify CSR about the waiting list entry of this subscription for this subscriber.


 Note:

<b>ID#: BPM-CIM-073</b>	<b>Raised By: -</b>
<b>UR: Define payment responsible for Accounts</b>	
<b>Current Flow:</b>  N/A	
<b>Detailed Requirement:</b>  Target system shall allow defining a customer as a payment responsible for the account types Enterprise and Official.	
 Note:	

<b>ID#: BPM-CIM-074</b>	<b>Raised By: -</b>
<b>UR: Prove contact sub-type</b>	
<b>Current Flow:</b>  N/A	
<b>Detailed Requirement:</b>  Target system shall provide contact sub-type property that is attached to each contact type. The contact sub-type can be for example: Martyr family Engineer  Assigning a sub-type requires attachment of proof document by CSR.	
 Note:	

Prepared (Subject resp)		No.		
Marwan Khoury		1029-FCP 132 1747		
Approved (Document resp)	Checked	Date	Rev	Reference
Ziad Hobeika		2018-07-10	D	

<b>ID#: BPM-CIM-075</b>	<b>Raised By: -</b>
<b>UR: Set ADSL username</b>	
<b>Current Flow:</b>  N/A	
<b>Detailed Requirement:</b>  Target system shall allow CSR to set the ADSL username of the user during ADSL contract subscription. If the username already exists, an error should be returned to the CSR prompting him to choose another username.	
 <i>Note:</i>	

<b>ID#: BPM-CIM-076</b>	<b>Raised By: -</b>
<b>UR: Cancel contract creation</b>	
<b>Current Flow:</b>  N/A	
<b>Detailed Requirement:</b>  The workflow to create a contract passes through several states on CRM, during these stages, the process may remain idle for a period of time greater than 45 days  In this case, if the idle reason is related to customer pending action: <ol style="list-style-type: none"> <li>1. Customer is not answering on the last mile request</li> <li>2. Customer did not pay the subscription fee and the CSR initiated the workorder CRM shall cancel the contract creation automatically and free the reserved line path on Inventory.</li> </ol>	
 <i>Note: In case a payment was already made, the balance will not be adjusted. It is the responsibility of the master financial system to balance the payment that was made for the installation fee</i>	

<b>ID#: BPM-CIM-077</b>	<b>Raised By: -</b>
<b>UR: Add CPT Service</b>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

**Current Flow:**
**Detailed Requirement:**

CPT service is used over ST network to directly associate a 4-digit number to a 7-digit PSTN number for incoming call routing.


The caller can reach the 7-digit number by dialling the CPT 4-digit number.


Target system shall provide possibility to the CSR to add CPT service from CRM. The CSR selects the CPT service that corresponds to the number of provinces requested by the customer.

The CPT 4-digit number shall be accessible in all provinces the customer chooses unless he/she wants it in one province only.

CPT numbers are unique per province and they can be repeated in every province. CSR can explicitly set the CPT number.

If the CPT number is already reserved/active, an error will be returned to CRM.

 Note:

<b>ID#: BPM-CIM-078</b>	<b>Raised By: -</b>
<b>UR: Remove CPT Service</b>	
<b>Current Flow:</b>	
<b>Detailed Requirement:</b>	
Target system shall provide the CSR with the possibility to remove the CPT service.	
The CSR selects the CPT service for the related contract and Submits Remove CPT Service Order.	
 Note:	

<b>ID#: BPM-CIM-079</b>	<b>Raised By: -</b>
<b>UR: Submit Add CPT Service Order</b>	
<b>Current Flow:</b>	
<b>Detailed Requirement:</b>	
Before submitting “Add CPT Service” order, CSR should:	



Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

- a. Retrieve the list of provinces from XAKTA.
- b. Select the provinces where the CPT number should be accessible.

**Step 1a:**

*Step 1a.1:* If a single province is selected, CSR will open the corresponding contract and request a list of available CPT numbers in that specific province.

*Step 1a.2:* CRM shall automatically, set the CPT number state in XAKTA to Active and link the CPT number to the 7-digits PSTN number along with the chosen province.

*Step 1a.3:* The CSR initiate a workorder for the corresponding OMC team of that specific province.


*Step 1a.4:* Once the OMC team finish the configuration, they mark the workorder as complete

*Step 1a.4:* CRM automatically adds the corresponding service and the chosen CPT number on the billing system for the selected contract.

**Step 1b:**

If multiple provinces are selected, CSR, and for information purpose only, will be given a page to check which CPT number is available in all provinces.

Once this check is done, CSR shall proceed in adding the CPT service one by one on the different contracts where the customer wants the CPT. In other words, repeating 'Step 1.a' for each contract, province pair.


 *Note: The service activation happens on the billing system prior to fulfilment as per ST request.*

<b>ID#: BPM-CIM-080</b>	<b>Raised By: -</b>
<b>UR: Submit Remove CPT Service Order</b>	
<b>Current Flow:</b>	
<b>Detailed Requirement:</b>	
<p>After the CSR submits "Remove CPT Service" order, the following actions are performed:</p> <ol style="list-style-type: none"> <li>a. CRM retrieves the CPT number information along with the OMCs linked to it.</li> <li>b. CSR sends a work order for de-activation fulfilment to the OMC team in each province.</li> <li>c. OMC teams fulfils the order by removing the CPT configuration manually from each switch and then mark the order as fulfilled</li> </ol>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

- d. Once an OMC team completes its ownwork-order, CRM automatically frees the reserved CPT number in XAKTA and remove the service from the billing system for the related contract.

 Note:

<b>ID#: BPM-CIM-081</b>	<b>Raised By: -</b>
<b>UR: Leased Line Moving</b>	
<b>Current Flow:</b>	
<p><b>Detailed Requirement:</b></p> <p>Target system should allow Leased Line moving operation. The operation is initiated by CSR and is executed following a specific workflow.</p> <p>A defined fee for the Leased Line Moving operation will be visible to the CSR before submitting the work order. This fee shall be posted to customer's bill as charges upon execution.</p> <p>The inventory team update the new line path reservation in inventory and free the old path.</p> <p>Upon completion of infrastructure connections, the order is posted on BIL to update billing system.</p>	
 Note:	

<b>ID#: BPM-CIM-082</b>	<b>Raised By: -</b>
<b>UR: Line Moving To New Switch</b>	
<b>Current Flow:</b>	
<p><b>Detailed Requirement:</b></p> <p>In Line moving to new switch, the phone number is changed, and the reservation is modified.</p> <p>Target system shall allow the line moving to new switch operation via customer request in CSO.</p> <p>CSR using a nearby phone number to the customer new address, verifies that the new line path consists of a switch change.</p>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

If customer has an ADSL contract linked to this telephony line, BPM shall automatically notify CSR and initiate ADSL line moving operation:


1. In case there is no ADSL availability at the destination, CSR will be notified to cancel the ADSL before proceeding with Telephony Line Moving and operation will be completed at this point.
2. In case customer does not want to move ADSL, CSR will be notified that customer has an existing ADSL and that it will be moved in case he does not cancel it.
3. In case ADSL is to be moved, the corresponding payments, related to two implicit requests (Telephony Line Moving and ADSL Line Moving) should be added as a service sale in case of cash or fees in case of invoice
  - a. Two separate requests shall be inserted by CRM as a service sale and given to the customer as a reference.

CSR selects a new phone number for the customer and reserves the new line path. Then, the work-order is routed across Switch/MDF/Cabinet/DP teams where applicable. If ADSL contract is to be moved, the new port in the destination DSLAM shall be reserved, a workorder to remove the old connection in the old switch, relaying the line in the new switch and fees are collected/posted to the ADSL contract

Once work-order is completed by all teams, the operation is posted to Order Manager.


Order Manager should modify the customer address in billing system, update phone number in contract, configure automatic switches through EMA when applicable – including Huawei DSLAM activation if ADSL line is moved -, activate reservation of new line path and remove the previous line path through XAKTA. Operation fee shall be treated as specified in requirement **'Fees Payment Method'**.

 Note:

<b>ID#: BPM-CIM-083</b>	<b>Raised By: -</b>
<b>UR: Change customer password for network services</b>	
<b>Current Flow:</b>	
<b>Detailed Requirement:</b>	
CRM shall allow CSR to perform change password for the customer network services where supported. The password is changed via EMA and the network node must support such operation.	
 Note:	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

--

<b>ID#: BPM-CIM-084</b>	<b>Raised By: -</b>
<b>UR: Override telephony subscriptions threshold due to free phone numbers count limit on switch</b>	
<b>Current Flow:</b>	
<b>Detailed Requirement:</b>  During Telephony Line Reservation check, an indication that the free phone numbers threshold has been reached might be returned from inventory. Target system should provide the CSR with an option to override Switch free phone numbers threshold check. This option shall only be available to the CSR after approval from an approval group created in CRM. The CSR routes the workflow to approval group. Only after the approval from a member of the approval group, the CSR can resume the subscription on these switches.	
 <i>Note:</i>	


<b>ID#: BPM-CIM-085</b>	<b>Raised By: -</b>
<b>UR: Create ADSL Contract</b>	
<b>Current Flow:</b>	
<b>Detailed Requirement:</b>  ADSL in the target system is treated as a separate contract if the subscriber requests it directly from ST and not through ISP. The subscriber is pre-requested to have a telephony contract (PSTN/ISDN/PES). CSR chooses to create an ADSL contract for this specific subscriber. Customer chooses: <ul style="list-style-type: none"> <li>• The telephony contract to which the ADSL contract must be linked.</li> <li>• The ADSL username</li> <li>• The ADSL password</li> </ul> CSR using CRM performs: <ul style="list-style-type: none"> <li>• Username verification through AAA web-service call.</li> <li>• Free ADSL line retrieval through Xakta</li> <li>• Xakta line path reservation.</li> </ul>	


Prepared (Subject resp)		No.		
Marwan Khoury		1029-FCP 132 1747		
Approved (Document resp)	Checked	Date	Rev	Reference
Ziad Hobeika		2018-07-10	D	

- When applicable, DSLAM port auto-provisioning or work-order creation for DSLAM port provisioning.
- Work-order creation for cabling.


Once cabling work-order is completed, CRM automatically performs:

- Contract activation in BSCS.
- User activation through AAA webservice via EMA.
- Xakta line path activation.

 *Note:*

<b>ID#: BPM-CIM-086</b>	<b>Raised By: -</b>
<b>UR: Create GSHDSL Contract</b>	
<b>Current Flow:</b>	
<p><b>Detailed Requirement:</b></p> <p>GSHDSL in the target system is treated as a separate contract and can only be requested from ST directly.</p> <p>GSHDSL line requires a dedicated line not including voice service support. Hence, cabling at DP level will be required.</p> <p>CSR chooses to create an GSHDSL contract for a specific subscriber.</p> <p>Customer chooses:</p> <ul style="list-style-type: none"> <li>• The GSHDSL username</li> <li>• The GSHDSL password</li> </ul> <p>CSR using CRM performs:</p> <ul style="list-style-type: none"> <li>• Username verification through AAA web-service call.</li> <li>• Free GSHDSL line retrieval through Xakta.</li> <li>• Xakta line path reservation</li> <li>• When applicable, GSHDSL port auto-provisioning or work-order creation for DSLAM port provisioning.</li> <li>• Work-order creation for cabling at MDF/Cabinet/DP levels.</li> </ul> <p>Once cabling work-orders are completed, CRM automatically performs:</p> <ul style="list-style-type: none"> <li>• Contract activation in BSCS.</li> <li>• Customer activation through AAA web-service via EMA.Xakta line path activation.</li> </ul>	
 <i>Note:</i>	

Prepared (Subject resp)		No.		
Marwan Khoury		1029-FCP 132 1747		
Approved (Document resp)	Checked	Date	Rev	Reference
Ziad Hobeika		2018-07-10	D	

<b>ID#: BPM-CIM-087</b>	<b>Raised By: -</b>
<b>UR: Create Leased Line Contract</b>	
<b>Current Flow:</b>	
<b>Detailed Requirement:</b>	
<p>Leased Line in the target system is treated as a separate contract.</p> <p>CSR chooses to create a Leased Line contract for a specific subscriber.</p> <p>Customer provides:</p> <ul style="list-style-type: none"> <li>• A phone number for every location where the leased line would be connected.</li> </ul> <p>CSR using CRM performs:</p> <ul style="list-style-type: none"> <li>• Free Leased Line retrieval through Xakta using phone number(s) provided.</li> <li>• Xakta line path reservation.</li> <li>• Work-order creation for provisioning and cabling at MDF/Cabinet/DP levels.</li> </ul> <p>Once cabling work-orders are completed, CRM automatically performs:</p> <ul style="list-style-type: none"> <li>• Xakta line path activation</li> <li>• Contract activation in BSCS.</li> </ul>	
 <i>Note:</i>	

<b>ID#: BPM-CIM-088</b>	<b>Raised By: -</b>
<b>UR: Create FTTB contract</b>	
<b>Current Flow:</b>	
<b>Detailed Requirement:</b>	
<p>FTTB subscription in the target system is treated as a separate contract.</p> <p>CSR chooses to create a FTTB contract for a specific subscriber.</p> <p>Customer provides:</p> <ul style="list-style-type: none"> <li>• A nearby phone number to the location where the fibre line would be connected.</li> </ul> <p>CSR using CRM performs:</p>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

- Free fibre line retrieval through Xakta using nearby phone number.
- Xakta line path reservation
- Work-order creation for provisioning and cabling at MDF/Cabinet/DP levels.

Once cabling work-orders are completed, CRM automatically performs:

- Xakta line path activation
- Contract activation in BSCS.

 *Note:*

<b>ID#: BPM-CIM-089</b>	<b>Raised By: -</b>
<b>UR: Contract Deactivation</b>	
<b>Current Flow:</b>	
<p><b>Detailed Requirement:</b></p> <p>Target system shall allow contract deactivation from CRM. Every contract deactivation shall include a 'deactivation reason' that is provided by CSR. The reason could be:</p> <ul style="list-style-type: none"> <li>• Deactivation due to ST request – that is set by CSR</li> <li>• Deactivation due to Customer request – that is set by CSR</li> <li>• Deactivation due to Dunning – that is set automatically by Order Manager.</li> </ul> <p>Depending on each contract type, deactivation procedure shall be handled as follows:</p> <p>1. Telephony contract: If switch is manual, a workorder is submitted to Switch team to deactivate the number on the switch. Otherwise, Order Manager deactivates number on the switch. Request then goes to MDF, Cabinet, DP teams to remove physical connections from customer site. Request then goes to Order Manager to release reservation in Xakta and deactivate contract in BSCS.</p> <p>2. ADSL contract</p> <p>If DSLAM make is Huawei, Order Manager deactivates DSLAM port through EMA. Otherwise, a workorder is posted to PDN team to deactivate DSLAM port, then workorder sent to MDF team to remove jumper connections.</p>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

Request resumes with Order Manager to remove subscriber from AAA, release reservation in Xakta and deactivate contract in BSCS and finalize workorder status in CRM.

If ADSL line is through MSAN, workorder is sent to MDF team to remove jumper connections, then Order Manager removes subscriber from AAA release reservation in Xakta, deactivate contract in BSCS and finalize workorder status in CRM.

### 3. GSHDSL contract

CRM removes subscriber from AAA via Order Manager.

A work-order is posted to MDF, Cabinet, DP team to remove physical connectivity. Order Manager releases reservation in Xakta, deactivate contract in BSCS and finalize work-order status in CRM.

### 4. Leased Line contract


Request is posted as workorder to LL team in every site where the reservation exists.


Workorder then goes to Order Manager to release LL reservation in Xakta and deactivate contract in BSCS and finalize workorder status in CRM.

### 5. FTTB contract

Request is posted as a workorder to FTTB team to deactivate the port on the fibre switch and remove physical connections.

Workorder then goes to Order Manger to release reservation in Xakta, deactivate contract in BSCS and finalize workorder status in CRM.


 *Note:*

<b>ID#: BPM-CIM-090</b>	<b>Raised By: -</b>
<b>UR: OCC Addition by Accounting team</b>	
<b>Current Flow:</b>	
<b>Detailed Requirement:</b>	
<p>Target system shall provide the possibility of adding an OCC with the charges as input for the accounting team</p> <p>An operation, shall be available for the accounting team to add an OCC for a specific customer along with the reason for adding the OCC</p>	
 <i>Note:</i>	



Prepared (Subject resp)		No.		
Marwan Khoury		1029-FCP 132 1747		
Approved (Document resp)	Checked	Date	Rev	Reference
Ziad Hobeika		2018-07-10	D	

--

<b>ID#: BPM-CIM-091</b>	<b>Raised By: -</b>
<b>UR: Bulk Operations</b>	
<b>Current Flow:</b>	
<p><b>Detailed Requirement:</b></p> <p>Target system shall support execution of bulk operations. The information is retrieved from a file containing the current reservation information and the new reservation information is already filled.</p> <p>The following logic applies when performing bulk action:</p> <ol style="list-style-type: none"> <li>1. Bulk operations will be always advantageous</li> <li>2. Bulk operations will be possible for Telephony Line Moving Same Switch and Telephony Line Moving New Switch</li> <li>3. Each of the supported operations will have its own input</li> <li>4. The input provided shall consider that the destination port and destination numbers are free and the identification of the customer is on the provided current phone number</li> <li>5. Since this is a bulk operation and the data is already provided, this implicitly means that <ol style="list-style-type: none"> <li>a. The physical connection is already established. Accordingly, no work orders for physical connection will be required and no work order will be initiated from CRM</li> <li>b. The switch and core configuration is already done. Accordingly, no fulfilment will be required.</li> <li>c. The line moving same switch operation will impact XAKTA only.</li> <li>d. The line moving new switch operation will impact XAKTA and BSCS only.</li> </ol> </li> </ol> <p>In this case, the services that are not available in the new switch will automatically be deleted</p> <ol style="list-style-type: none"> <li>6. This operation will either be provided over BIL or over BPM.</li> <li>7. Encountered errors will be logged but the process will continue</li> </ol>	
 <i>Note:</i>	


<b>ID#: BPM-CIM-092</b>	<b>Raised By: -</b>
<b>UR: Move ADSL contract line port</b>	
<b>Current Flow:</b>	
<b>Detailed Requirement:</b>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

This operation is usually requested by companies when customer wants to have his existing ADSL on another telephony line.

The process followed is the below:


- CSR goes to the specific contract owning the ADSL port that will be moved
- CSR chooses the “Move ADSL contract line port” operation and the list of all Telephony contracts of that customer will be displayed.
- CSR chooses the destination phone number
  - If the destination phone number is within the same switch, a workorder to relay the line carrying the new phone number to the ADSL port is sent to MDF team and fees are collected/posted to the ADSL contract.
  - If the destination phone number is in another switch, CRM shall check the availability for ADSL port in the new switch. If available, the new port in the destination DSLAM shall be reserved, a workorder to remove the old connection in the old switch, relaying the line in the new switch and fees are collected/posted to the ADSL contract.
- The link to the ADSL contract on the old phone number shall be removed and a link to the ADSL contract on the new telephony contract shall be created


 Note:

<b>ID#: BPM-CIM-093</b>	<b>Raised By: -</b>
<b>UR: ADSL ISP ordering</b>	
<b>Current Flow:</b>	
<b>Detailed Requirement:</b>	
<p>ADSL contract can be ordered by the customer through an Internet Service Provider (ISP) that is a partner with ST.</p> <p>In this case the ADSL is considered as a service provided by the ISP using the infrastructure/link of ST.</p> <p>The subscriber initiates the request via ISP office which is outside of CCBS. Afterwards, the process that occurs between the ISP and ST is as follows:</p> <ol style="list-style-type: none"> <li>1. ISP representative visits the CSO and provides a list of the numbers that need ADSL activation.</li> <li>2. CSR opens the customer file, choose the corresponding Telephony line where the ADSL ISP service will be added</li> <li>3. CSR chooses an operation called “ISP ADSL” and then the ISP among the list of defined ISPs</li> <li>4. A process similar to the “New ADSL Contract” will be initiated with the following exceptions:</li> </ol>	

Prepared (Subject resp)		No.		
Marwan Khoury		1029-FCP 132 1747		
Approved (Document resp)	Checked	Date	Rev	Reference
Ziad Hobeika		2018-07-10	D	

- Username choice shall not be available.
- The request for free DSLAM port shall contain the chosen ISP.
- No new contract will be created but an 'ISP ADSL' service shall be added on the chosen telephony contract.


 Note:

<b>ID#: BPM-CIM-094</b>	<b>Raised By: -</b>
<b>UR: Add Service Operation</b>	
<b>Current Flow:</b>	
<b>Detailed Requirement:</b>	
Target system shall support adding services to a customer contract.	
CSR shall:	
<ol style="list-style-type: none"> <li>Select the contract of the customer</li> <li>Choose add service operation</li> <li>A list of services is retrieved from billing system.</li> <li>Select one or multiple services to be added. <ul style="list-style-type: none"> <li>If multiple services are chosen, special services shall not be available in selection such as (PBX, CPT, ADSL, DDI, etc...)</li> <li>Adding multiple services results in only one service addition charge.</li> </ul> </li> <li>Submit the order to order manager.</li> </ol>	
 Note:	


<b>ID#: BPM-CIM-095</b>	<b>Raised By: -</b>
<b>UR: Billing Account Creation</b>	
<b>Current Flow:</b>	
<b>Detailed Requirement:</b>	
Billing Account creation will be part of the contract creation and shall include the address of that specific contract.	
The address of the billing account(s) can be different than the address of the customer	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

The billing account address is not read from the address on the customer level and must be filed by the CSR.


 *Note:*

### 2.3.3 Identity Management


<b>ID#: BPM-IDM-001</b>	<b>Raised By: -</b>
<b>UR: Customer Care User Access Rights</b>	
<b>Current Flow:</b>  CRM provides the ability to update the editable customer information for all customers' types based on user profile and access rights, some data are updated locally on CRM while others are synchronized with other systems.	
<b>Detailed Requirement:</b>  System shall allow defining User Access Rules that will define the actions allowed by each User or Group of Users.	
 <i>Note:</i>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

### 2.3.4 Information Management


<b>ID#: BPM-IFM-001</b>	<b>Raised By: -</b>
<b>UR: Internal admin notifications</b>	
<b>Current Flow:</b>	
<b>Detailed Requirement:</b>  BPM allows sending notifications to CRM users using business process designer element “Add Data”. The process can be started by an admin user. Another process can be started to disable particular notifications after some time interval. These notifications will stop appearing for CRM users.	
 <i>Note:</i>	

### 2.3.5 Resource Management and Control


<b>ID#: BPM-RMC-001</b>	<b>Raised By: -</b>
<b>UR: Manage Phone number to Device connectivity</b>	
<b>Current Flow:</b>	
N/A	
<b>Detailed Requirement:</b>  Upon receiving the reservation request from CSR, the MDF/Switch teams might at some situations face a technical/physical limitation with the selected Device ID in the reservation request. They would want to substitute the device ID with another one more plausible for the situation. This action would require giving MDF/Switch team the possibility to change phone number to device connectivity. If a device is connected to a phone number, MDF/Switch team should be able to disconnect it If a device is not connected to any phone number, MDF/Switch team should be able to connect it to a particular number.	
 <i>Note:</i>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

### 2.3.6 Service and Resource Assurance

<b>ID#: BPM-SRA-002</b>	<b>Raised By: -</b>
<b>UR: Change Device Command</b>	
<b>Current Flow:</b>  N/A	
<b>Detailed Requirement:</b>  Target CRM system shall provide GUI to MDF/Switch team to perform the Change Device action where the reserved device on the switch and the inventory is substituted with another one chosen by the MDF/Switch team	
 <i>Note:</i>	


### 2.3.7 Core Billing and Invoice


<b>ID#: BPM-CBI-001</b>	<b>Raised By: -</b>
<b>UR: Initiate Instalment Request</b>	
<b>Current Flow:</b>  	
<b>Detailed Requirement:</b>  System shall offer the CSR the possibility to initiate the instalment process for a specific customer invoice only in case the invoice has passed the due date.	
 <i>Note: Initiation of the instalment request can be applied on one invoice at a time</i>	


<b>ID#: BPM-CBI-002</b>	<b>Raised By: -</b>
<b>UR: Select Instalment Plan</b>	
<b>Current Flow:</b>  	
<b>Detailed Requirement:</b>  System shall allow the CSR to retrieve the instalment templates that are defined on billing system based on the number of payments.	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference


Once the templates are retrieved, CSR provides the options of instalment plans offered to the customer and customer decides which plan to choose

 *Note: CSR can advise based on experience which instalment plan will be accepted and which will be rejected*

<b>ID#: BPM-CBI-003</b>	<b>Raised By: -</b>
<b>UR: Instalment Plan Payment Calculations</b>	
<b>Current Flow:</b>	
<b>Detailed Requirement:</b>	
System shall display the open invoice amount and the incurred late fees for the invoice that was subject to the instalment initiation request. CSR shall be able to simulate, based on the chosen template, the total number of instalments, the corresponding amount for each instalment and their due dates	
 <i>Note:</i>	

<b>ID#: BPM-CBI-004</b>	<b>Raised By: -</b>
<b>UR: Instalment Plan Payment Reductions</b>	
<b>Current Flow:</b>	
<b>Detailed Requirement:</b>	
System shall offer the CSR the possibility to simulate a reduction on the late fees of the invoice where the instalment plan was initiated. The reduction rates are imposed by official ST rules and are input by CSR manually. System shall re-calculate the incurred late fees and the corresponding amount for each instalment.	
 <i>Note: Late fees reduction shall not change the total number of instalments and the instalments due dates.</i>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

<b>ID#: BPM-CBI-005</b>	<b>Raised By: -</b>
<b>UR: Instalment Plan Approval</b>	
<b>Current Flow:</b>	
<b>Detailed Requirement:</b> <p>After agreeing on the instalment plan with the customer, CSR submits an approval to the designated entity that is defined in CRM. The approval entity could reject or approve the request. The following outlines the relative subsequent steps in each scenario</p> <p>In case designated entity decides to reject the request:</p> <ul style="list-style-type: none"> <li>a. CRM shall enforce a mandatory comment field to be filled before the allowing the designated entity to reject the returns the request</li> <li>b. CSR receives the rejection of the payment plan and CRM automatically cancels the customer request. The CSR should contact the customer and suggest a different payment plan and, once agreed, initiate a new instalment request.</li> </ul> <p>In case designated entity approves the request:</p> <ul style="list-style-type: none"> <li>a. CRM forwards the approval to the CSR</li> <li>b. CRM issue an adjustment to the invoice's late fees, when applicable</li> <li>c. CRM creates the instalment plan</li> <li>d. CSR receives the response and should inform the customer of the approval of the payment plan request</li> <li>e. The instalment plan will become visible to the cashier.</li> </ul>	
 <i>Note:</i>	

### 2.3.8 Big Data Analytics and Business Intelligence

<b>ID#: BPM-BDA-001</b>	<b>Raised By:</b>
<b>UR: Line Subscription Report</b>	
<b>Current Flow:</b> <p>This report is generated with Line subscriptions information for a specific period, out of Coheris'CRM application. The report contains information in the following heads,</p> <ul style="list-style-type: none"> <li>1. Category</li> <li>2. Subscribe-Re'Subscribe</li> <li>3. Priority</li> </ul>	




Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

4. Phone type  
5. Number of Application  
The source information is available in Coheris-CRM application and cloned to INTERDBX database on daily basis for report extraction/generation.

**Detailed Requirement:**

Target solution should generate a report on subscriptions for a specific period and CSO. The information should include customer category, subscription type (PSTN/ISDN, ADSL, FTTB, LL), count of subscriptions.

 *Note:*

<b>ID#: BPM-BDA-002</b>	<b>RAISED BY:</b>
<b>UR: Detailed Subscription Report</b>	
<b>Current Flow:</b>  This report is generated with detailed information of line subscriptions for a specific period, out of Coheris'CRM application. The report contains information in the following heads, 1. Phone number 2. Subscribe-Re'Subscribe 3. Date of establishment 4. Classification 5. Priority 6. Font type 5. Status The source information is available in Coheris-CRM application and cloned to INTERDBX database on daily basis for report extraction/generation.	
<b>Detailed Requirement:</b>  Target solution should generate a report on detailed information of line subscriptions for a specific period and CSO. The information should contain phone number, date of connection, status, customer group, phone type, customer name and creation date.	
 <i>Note:</i>	

<b>ID#: BPM-BDA-003</b>	<b>RAISED BY: -</b>
<b>UR: Area Wise Line Subscription Report</b>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

**Current Flow:**

This report is generated with area specific in subscriptions information for a specific period, out of Coheris'CRM application. The report contains information in the following heads,


1. Area
2. Priority
3. Line Type
4. Number of transaction

The source information is available in Coheris-CRM application and cloned to INTERDBX database on daily basis for report extraction/generation.


**Detailed Requirement:**

Target solution should generate a report on information of line subscriptions area wise for a specific period and province. The information should include area identifier, area name, category, phone type and number of subscriptions.

 *Note:*

<b>ID#: BPM-BDA-004</b>	<b>RAISED BY: -</b>
<b>UR: Operation Details in CSO Report</b>	
<b>Current Flow:</b> <p>ST generates this report on operation details from Coheris-CRM application. The report is in format of excel file. The report contains operation name, count of such operation with status closed and open. The operation items taken into consideration are:</p> <ol style="list-style-type: none"> <li>1. Cancel line</li> <li>2. Installation line</li> <li>3. Change Subscriber</li> <li>4. Technical complaint</li> <li>5. ....</li> </ol>	
<b>Detailed Requirement:</b> <p>The target solution should generate a report for operation details for a specific period with province or CSO. The operations are the ones that initiated by the customer request such as line termination.</p> <p>The data should be listed as operation kind, operation status and the count of operations in each status, kind.</p>	
<p> <i>Note:</i></p>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference


<b>ID#: BPM-BDA-005</b>	<b>RAISED BY: -</b>
<b>UR: Frequently Line Interrupted Numbers Report</b>	
<b>Current Flow:</b>  This report is generated for frequently corrupted telephone numbers, out of Coheris-CRM application. The report contains the following information, 1. Telephone number 2. number of interruptions The source information is available in Coheris-CRM application and cloned to INTERDBX database on daily basis for report extraction/generation.	
<b>Detailed Requirement:</b>  The target solution should generate a report on telephone numbers with number of interruptions, the input parameters are the target CSO and period. The solution should consider the following information in the generated report, 1. Telephone number 2. number of interruptions	
 <i>Note:</i>	


<b>ID#: BPM-BDA-006</b>	<b>RAISED BY: -</b>
<b>UR: Specific Operation Execution in CSO report</b>	
<b>Current Flow:</b>  This report is generated out of Coheris-CRM application with details of operation specific information in CSO. The report contains the following information, 1. Phone Number 2. Date created 3. Closing Date 4. Section 5. Subscribe/Re-subscribe 6. Official 7. Operation Number The source information is available in Coheris-CRM application and cloned to INTERDBX database on daily basis for report extraction/generation.	
<b>Detailed Requirement:</b>  The target solution should generate a report on the information related to the operations carried out in a specific CSO, this report should be generated based	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

on the following parameters: target period, operation\_type and province or CSO the generated document should contain the following info: Operation\_id, operation\_type, username, department, creation\_date, end\_date, phone\_number.


 Note:


<b>ID#: BPM-BDA-007</b>	<b>RAISED BY: -</b>
<b>UR: Used cables in CSO report</b>	
<b>Current Flow:</b>  This report is generated out of Coheris-CRM application with total consumed cable and detailed consumed cable per each of operation type e.g: line subscription, line moving... for a limited period and specific CSO.	
<b>Detailed Requirement:</b>  The target solution should generate report with total consumed cable and detailed consumed cable per each of operation type e.g: line subscription, line moving... for a limited period and specific CSO.	
 Note:	

<b>ID#: BPM-BDA-008</b>	<b>RAISED BY: -</b>
<b>UR: Details Used cables in CSO report</b>	
<b>Current Flow:</b>  This report is generated out of Coheris-CRM application with details about the consumed cables in each operation containing operation data, name , phone number and cable length.	
<b>Detailed Requirement:</b>  The target solution should generate report with details about the consumed cables in each operation containing operation name , phone number, operation date and cable length.	
 Note:	

<b>ID#: BPM-BDA-009</b>	<b>RAISED BY: -</b>
-------------------------	---------------------

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

<b>UR: History of CSO Technical team actions report</b>	
<b>Current Flow:</b>  CRM generates this report about the total number of closed operations by each technical teams, in the dedicated period for the dedicated CSO.	
<b>Detailed Requirement:</b>  Target CRM should generate a report about the total number of closed operations by each technical team grouped by the assigned tasks to technical team, in a specified period for a specific CSO.	
 <i>Note:</i>	


<b>ID#: BPM-BDA-010</b>	<b>RAISED BY: -</b>
<b>UR: General statistics about complaints report</b>	
<b>Current Flow:</b>  This report is generated with the count of registered complaints in each CSO for the dedicated period grouped by the complaint category.	
<b>Detailed Requirement:</b>  Target system should generate the needed report about the count of registered complaints in each CSO for a specific period grouped by each of complaint category and sub-category.	
 <i>Note:</i>	

<b>ID#: BPM-BDA-011</b>	<b>RAISED BY: -</b>
<b>UR: Complaints resolving time report</b>	
<b>Current Flow:</b>  This report shows the percentage of the fixed complaints in each time slice (12 hours , 24 hours, 48 hours, >48 hours) with the average of fixing time for the target CSO in the target period.	
<b>Detailed Requirement:</b>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

Target system should generate report showing the percentage of the resolved complaints in each time interval (12 hours, 24 hours, 48 hours, >48 hours) with the average of resolution time of a specific CSO in the specified period.

 *Note:*


<b>ID#: BPM-BDA-012</b>	<b>RAISED BY: -</b>
<b>UR: Complaints status report</b>	
<b>Current Flow:</b>  CRM generates this report about the total registered new complaints, rounded complaints, fixed complaints, rounded again, count of subscribers and switch capacity for the target CSO & target period.	
<b>Detailed Requirement:</b>  Target system should generate a report about the <ul style="list-style-type: none"> <li>new complaints and the percentage of the new complaints from the total number of complaints grouped by contract type (PSTN, xDSL, FTTx, LL)</li> <li>resolved complaints and the percentage of the resolved complaints from the total number of complaints grouped by contract type (PSTN, xDSL, FTTx, LL)</li> <li>invalid complaints and the percentage of the invalid complaints from the total number of complaints grouped by contract type (PSTN, xDSL, FTTx, LL)</li> <li>postponed complaints from previous period(s) and the percentage of the postponed complaints from previous period(s) from the total number of complaints grouped by contract type (PSTN, xDSL, FTTx, LL)</li> <li>count of subscribers</li> <li>percentage of total number of complaints from the total count of subscribers</li> </ul>	
 <i>Note:</i>	


<b>ID#: BPM-BDA-013</b>	<b>RAISED BY: -</b>
<b>UR: Network failures in CSO report</b>	
<b>Current Flow:</b>  CRM generates report contains a table with each failure category and assigned fixing intervals (12 H, 1D, 2Ds,3Ds,4...). For the target CSO and the target period.	
<b>Detailed Requirement:</b>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

CRM generates report contains a table with each failure category and related resolution duration (12 H, 1D, 2Ds,3Ds,4...). For a specific CSO and a specific period.


 *Note:*


<b>ID#: BPM-BDA-014</b>	<b>RAISED BY: -</b>
<b>UR: Total number of ADSL speed increase operations report</b>	
<b>Current Flow:</b>	
<b>Detailed Requirement:</b> Target CRM should generate a report about the number of ADSL speed increase operations in a specific CSO and during a specific period, the number on speed increase operations should be grouped per each service speed (2 Mb,4Mb...).	
 <i>Note:</i>	


<b>ID#: BPM-BDA-015</b>	<b>RAISED BY: -</b>
<b>UR: Total number of ADSL speed decrease operations report</b>	
<b>Current Flow:</b>	
<b>Detailed Requirement:</b>  Target CRM should generate a report about the number of ADSL speed decrease operations in a specific CSO and during a specific period, the number of speed decrease operations should be grouped per each service speed (2Mb, 4 Mb....).	
 <i>Note:</i>	

<b>ID#: BPM-BDA-016</b>	<b>RAISED BY: -</b>
<b>UR: List of all contracts that were subject to ADSL speed increase</b>	
<b>Current Flow:</b>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

<b>Detailed Requirement:</b>  Target CRM should generate a report listing contracts whose subscribers requested ADSL speed increase operation, with information about the old and new speed in a specific CSO and during a specific period.
 <i>Note:</i>

<b>ID#: BPM-BDA-017</b>	<b>RAISED BY: -</b>
<b>UR: List of all contracts that were subject to ADSL speed decrease</b>	
<b>Current Flow:</b>	
<b>Detailed Requirement:</b> Target CRM should generate a report listing contracts whose subscribers requested ADSL speed decrease operation, with information about the old and new speed in a specific CSO and during a specific period.	
 <i>Note:</i>	

<b>ID#: BPM-BDA-018</b>	<b>RAISED BY: -</b>
<b>UR: Total number of cancelled ADSL subscriptions due to financial de-activation</b>	
<b>Current Flow:</b>	
<b>Detailed Requirement:</b>  Target CRM should generate a report containing the total number of cancelled ADSL subscriptions by collection on a province or CSO in a specific period.	
 <i>Note:</i>	

<b>ID#: BPM-BDA-019</b>	<b>RAISED BY: -</b>
<b>UR: Count of Change phone number operations for subscribers who have ADSL service</b>	



Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference


<b>Current Flow:</b>
<b>Detailed Requirement:</b>  CRM should provide on CSO level and for specific period, the total number of contracts whose owners requested change phone number operation and an ADSL contract is linked to that telephony contract.
<i>Note:</i>

<b>ID#: BPM-BDA-020</b>	<b>RAISED BY: -</b>
<b>UR: Contract take over operations for subscribers who have ADSL service</b>	
<b>Current Flow:</b>	
<b>Detailed Requirement:</b>  CRM should provide on CSO level and for specific period, the total number of contracts whose owners requested contract take over operation and an ADSL contract is linked to that telephony contract.	
<i>Note:</i>	

<b>ID#: BPM-BDA-022</b>	<b>RAISED BY: -</b>
<b>UR: Count of requests in waiting list on CSO.</b>	
<b>Current Flow:</b>	
<b>Detailed Requirement:</b>  Target CRM should provide the possibility to generate a report about the count of subscription requests in the waiting list for each of ADSL & Telephony contracts in a specific period for a specific CSO.	
<i>Note:</i>	


<b>ID#: BPM-BDA-023</b>	<b>RAISED BY: -</b>
-------------------------	---------------------

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference


<b>UR: List of requests in waiting list on CSO</b>	
<b>Current Flow:</b>	
<b>Detailed Requirement:</b>	
Target CRM should provide the possibility to generate a report contain all the subscription requests in the waiting list based on user choice ADSL or POTS in a specific period for a specific CSO, the report will contain, besides the customer information, the request date, the involved switch, the cabinet and the DP. In case of ADSL waiting list requests, the phone number will also be available.	
 <i>Note:</i>	


## 2.4 Architectural Block BIL

### 2.4.1 Order Capture and Verification

<b>ID#: BIL-OCV-001</b>	<b>Raised By:</b>
<b>UR: Order Manager Interactions</b>	
<b>Current Flow:</b>	
<p>The Order Manager currently interacts with the following entities.</p> <ul style="list-style-type: none"> <li>- Coheris CRM for customer profile management.</li> <li>- Webpack Provisioning for network resource management</li> <li>- BSCS for billing, contract and customer management.</li> <li>- payment table for payment application</li> <li>- Circee Inventory for specific resource reservations</li> </ul>	
<b>Detailed Requirement:</b>	
<p>The order manager shall connect to different nodes which will be replacing the functionalities provided in the as-is architecture.</p> <p>The new entities are:</p> <ul style="list-style-type: none"> <li>- BSCS for business support and control function</li> <li>- Ericsson Multi-Activation for provisioning function</li> <li>- XAKTA Inventory providing specific resource reservations functionality.</li> <li>- BpmOnline providing CRM function</li> <li>-</li> </ul>	
 <i>Note: Payment table interaction shall be part of the interaction with BSCS in the target architecture.</i>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

<b>ID#: BIL-OCV-002</b>	<b>Raised By:</b>
<b>UR: Order Manager Function - Incoming Request</b>	
<b>Current Flow:</b>  In the current architecture, Order Manager receives its requests inside a database table called EAI_Interface. This table is populated by Coheris CRM and Order Manager updates it. <ul style="list-style-type: none"> <li>The request contains the identifier of the business process to invoke and the associated business data.</li> <li>EAI scans the EAI_Interface table to see the records that need to be processed. (status = 2)</li> <li>The EAI fetches the record from the database, and sets the record status to “record currently processed” value. (status = 99)</li> </ul>	
<b>Detailed Requirement:</b>  Order Manager shall receive business orders from external systems through web-service interface.	
 <i>Note:</i>	

<b>ID#: BIL-OCV-003</b>	<b>Raised By:</b>
<b>UR: Order Manager Function - Processing Request</b>	
<b>Current Flow:</b>  In the current architecture, Order Manager receives its requests inside a database table called EAI_Interface. This table is populated by Coheris CRM and Order Manager updates it. <ul style="list-style-type: none"> <li>The request contains the identifier of the business process to invoke and the associated business data.</li> <li>EAI scans the EAI_Interface table to see the records that need to be processed. (status = 2)</li> <li>The EAI fetches the record from the database, and sets the record status to “record currently processed” value. (status = 99)</li> </ul>	
<b>Detailed Requirement:</b>  Order Manager shall start processing request directly upon request is received from external systems without implementing a queueing mechanism on northbound interface.	
 <i>Note:</i>	

<b>ID#: BIL-OCV-004</b>	<b>Raised By:</b>
<b>UR: Order Manager Function – web-service response</b>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

### Current Flow:

In the current architecture, Order Manager receives its requests inside a database table called EAI\_Interface. This table is populated by Coheris CRM and Order Manager updates it.


- The request contains the identifier of the business process to invoke and the associated business data.
- EAI scans the EAI\_Interface table to see the records that need to be processed. (status = 2)
- The EAI fetches the record from the database, and sets the record status to “record currently processed” value. (status = 99)

### Detailed Requirement:

The web-service response objects from the Order Manager shall comply with Open API Specification related to RESTful APIs interface.


For more info about OAS please refer to <https://swagger.io/specification/#oasDocument>

 Note:

<b>ID#: BIL-OCV-005</b>	<b>Raised By:</b>
<b>UR: Handling Request Logic – Calling External web-services</b>	
<b>Current Flow:</b>  OM sends the business data to a converter web-service, which role is to convert the XML business data into hierarchical business objects. For example, an XML string describing a customer with one contract is converted into a Customer object which aggregates a Contract object. OM identifies the business process invoked by Coheris CRM, and initiates the following processes: <ul style="list-style-type: none"> <li>• Calls the web service of first involved application, giving the correct parameters extracted from the business objects.</li> <li>• Gets the output of the called web service. If necessary, business objects are completed with data returned by web service.</li> <li>• In case of error, raises a message to the administrator, or performs retries...</li> <li>• If no error, calls the web service of next involved application.</li> </ul>	
<b>Detailed Requirement:</b>  OM shall be able to call web-services published from external systems.	
 Note:	

<b>ID#: BIL-OCV-006</b>	<b>Raised By:</b>
-------------------------	-------------------

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

<b>UR: Handling Request Logic – External Web-service Response.</b>	
<p><b>Current Flow:</b></p> <p>OM sends the business data to a converter web-service, which role is to convert the XML business data into hierarchical business objects. For example, an XML string describing a customer with one contract is converted into a Customer object which aggregates a Contract object.</p> <p>OM identifies the business process invoked by Coheris CRM, and initiates the following processes:</p> <ul style="list-style-type: none"> <li>• Calls the web service of first involved application, giving the correct parameters extracted from the business objects.</li> <li>• Gets the output of the called web service. If necessary, business objects are completed with data returned by web service.</li> <li>• In case of error, raises a message to the administrator, or performs retries...</li> <li>• If no error, calls the web service of next involved application.</li> </ul>	
<p><b>Detailed Requirement:</b></p> <p>Order Manager shall be able to decide on its flow execution based on response status of web-services from external system.</p> <p>The flow execution handling based on response status are listed in ‘Handling Request Logic – Handling External Web-service Response’.</p>	
<p> <i>Note:</i></p>	


<b>ID#: BIL-OCV-007</b>	<b>Raised By:</b>
<b>UR: Handling Request Logic – Handling External Web-service Response.</b>	
<p><b>Current Flow:</b></p> <p>OM sends the business data to a converter web-service, which role is to convert the XML business data into hierarchical business objects. For example, an XML string describing a customer with one contract is converted into a Customer object which aggregates a Contract object.</p> <p>OM identifies the business process invoked by Coheris CRM, and initiates the following processes:</p> <ul style="list-style-type: none"> <li>• Calls the web service of first involved application, giving the correct parameters extracted from the business objects.</li> <li>• Gets the output of the called web service. If necessary, business objects are completed with data returned by web service.</li> <li>• In case of error, raises a message to the administrator, or performs retries...</li> <li>• If no error, calls the web service of next involved application.</li> </ul>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

### Detailed Requirement:

Below is the mapping between web-service response status from external system and Order Manager flow execution handling.

- Response from Web-service from External System without error: Order Manager continues flow execution
- Response from Web-service from External System with Error: Order manager stops flow execution and sends email message to distribution list.

 Note:

<b>ID#: BIL-OCV-008</b>	<b>Raised By:</b>
<b>UR: Handling web-service response error distribution list.</b>	

### Current Flow:

OM sends the business data to a converter web-service, which role is to convert the XML business data into hierarchical business objects. For example, an XML string describing a customer with one contract is converted into a Customer object which aggregates a Contract object.

OM identifies the business process invoked by Coheris CRM, and initiates the following processes:

- Calls the web service of first involved application, giving the correct parameters extracted from the business objects.
- Gets the output of the called web service. If necessary, business objects are completed with data returned by web service.
- In case of error, raises a message to the administrator, or performs retries...
- If no error, calls the web service of next involved application.


### Detailed Requirement:


- The distribution list to which Order Manager will send notifications in case of error in flow execution is listed below: Billing team → for errors related to BSCS
- Inventory team → for errors related to Xakta
- Provisioning team → for errors related to EMA and auto-provisioning
- CRM team → for errors related to CRM

Each team is defined in order manager as a mailing list containing the addresses that shall receive the notifications.

 Note:

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference


<b>ID#: BIL-OCV-009</b>	<b>Raised By:</b>
<b>UR: Order Status on Order Manager</b>	
<b>Current Flow:</b>  The status of each order is retrieved from the database table EAI_Interface, by running an sql query and selecting the records. The status column in the table indicates the status of each order.	
<b>Detailed Requirement:</b>  The status of the orders for a given customer shall be retrieved from external systems.	
 <i>Note:</i>	


<b>ID#: BIL-OCV-010</b>	<b>Raised By:</b>
<b>UR: Order Cancellation</b>	
<b>Current Flow:</b>  Once the order is sent to Order Manager, it is not possible to cancel its processing. The customer shall decide to withdraw the order before the CSR submits the request from CRM to OM.	
<b>Detailed Requirement:</b>  Once the order is sent to Order Manager, it is not possible to cancel its processing. The customer shall decide to withdraw the order before the CSR submits the request from CRM to OM.	
 <i>Note:</i>	

<b>ID#: BIL-OCV-011</b>	<b>Raised By:</b>
<b>UR: Order Follow-up</b>	
<b>Current Flow:</b>  The order is followed from CRM. ST personnel who are eligible to view the orders will be able to follow up on the submitted requests to OM.	
<b>Detailed Requirement:</b>  The order is followed from CRM. ST personnel who are eligible to view the orders will be able to follow up on the submitted requests to OM.	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

 Note:

<b>ID#: BIL-OCV-012</b>	<b>Raised By:</b>
<b>UR: Order Roll-back</b>	
<b>Current Flow:</b>  During the OM workflow, if the process fails at certain action, whether it is related to external entities/nodes or internal, there will be no roll-back procedure performed on the external elements. An email notification will be sent to concerned parties, the errors will be fixed manually, and the order will be restarted.	
<b>Detailed Requirement:</b>  During the OM workflow, if the process fails at certain action, whether it is related to external entities/nodes or internal, there will be no roll-back procedure performed on the external elements. An email notification will be sent to concerned parties as per 'Handling web-service response error distribution list'. the errors will be fixed manually, and the order will be resumed from the point where it stopped.	
 Note:	

<b>ID#: BIL-OCV-013</b>	<b>Raised By:</b>
<b>UR: Order Manager Performance – Counters</b>	
<b>Current Flow:</b>  The number of processed requests are retrieved from the database table using sql query to select the count	
<b>Detailed Requirement:</b>  OM shall implement a mechanism to save counter entities on a disk file. The counter entities list is shown in 'Order Manager Performance – Counters listing'	
 Note:	

<b>ID#: BIL-OCV-014</b>	<b>Raised By:</b>
<b>UR: Order Manager Performance – Counters listing</b>	



Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference


**Current Flow:**

The number of processed requests are retrieved from the database table using sql query to select the count.

**Detailed Requirement:**

OM shall implement the following list of counter entities:

- Total Number of incoming requests
- Number of Incoming requests per node
- Total Number of outgoing requests
- Number of outgoing requests per node

 Note:

**ID#: BIL-OCV-015**
**Raised By:**
**UR: Customer Creation Order**
**Current Flow: -**

This process takes place when a new client has been created into Coheris CRM. The following actions must be performed by OM:


- Network activation into WebPack,
- Inventory activation into Circee,
- Customer, contract and services creation and activation into BSCS,
- Customer reference update into payment table of payment application,
- Customer reference update into Coheris CRM (i.e. BSCS customer identifier).

**Detailed Requirement: -**

Order Manager shall support "Customer Creation Order" when a client has been created into CRM and order submitted to OM.

The following actions must be performed by OM:

- Customer creation into BSCS even for prospect customers with the related information for each customer type (Syrian/Non-Syrian/Official/Enterprise) received from CRM.
- BSCS Customer Id update into CRM.

 Note:

**ID#: BIL-OCV-016**
**Raised By:**
**UR: Create Contract Order**
**Current Flow:**

This process takes place when a new line subscription has been created into Coheris CRM. The following actions must be performed by OM:

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

- 1) Network activation into WebPack,
- 2) Inventory activation into Circee,
- 3) Contract and services creation and activation into BSCS,
- 4) Customer reference update into payment table of payment application,
- 5) Customer reference update into Coheris CRM (i.e. BSCS customer identifier).

**Detailed Requirement:**

OM shall support “Contract Creation Order” when an existing customer becomes an active subscriber of a line: PSTN/PES/ISDN/DID/xDSL/Leased Line/Fibre.

The following actions must be performed by OM:

For Telephony and ADSL,

1. Contract creation in BSCS.
2. Network provisioning using Ericsson Multi-Activation node (EMA)
3. Inventory activation using XAKTA Inventory

For Leased Line, FTTB

1. Inventory activation using XAKTA
2. Contract creation in BSCS.

 Note:

<b>ID#: BIL-OCV-017</b>	<b>Raised By:</b>
<b>UR: Reserve Line Path Order</b>	
<b>Current Flow:</b>  Currently, line path reservation does not pass through order manager EAI.	
<b>Detailed Requirement:</b>  CRM shall post line path information to order manager: The Line Path object shall comprise the following properties: <ul style="list-style-type: none"> <li>• Parameters depending on the line type: LL, FTTB, GSHDSL, Telephony.</li> <li>• A resource id (eg. Phone number or username, etc...)</li> <li>• Vertical MDF and MDF Port</li> <li>• Cabinet, Cabinet Primary Port and Cabinet Secondary</li> <li>• DP</li> <li>• DP Port</li> <li>• Device ID (optional)</li> <li>• MIC(s) (optional in case of deported number)</li> </ul> For FTTB, additional nodes are: <ul style="list-style-type: none"> <li>• OLT</li> </ul>	

Prepared (Subject resp)		No.		
Marwan Khoury		1029-FCP 132 1747		
Approved (Document resp)	Checked	Date	Rev	Reference
Ziad Hobeika		2018-07-10	D	


- SPLITTER
- ONU


For Leased Line, additional nodes are:

- MIC
- DDF

The Order Manager shall perform the following action:

- Create line path on Inventory XAKTA
- Set line path status to “Planned for Activation” in XAKTA.

 Note:

<b>ID#: BIL-OCV-018</b>	<b>Raised By:</b>
<b>UR: Activate Contract Order</b>	
<b>Current Flow:</b>	
N/A	
<b>Detailed Requirement:</b>	
The OM shall set the Contract Status on BSCS from <i>On Hold</i> to <i>Active</i> when this order is received from CRM.	
 Note:	


<b>ID#: BIL-OCV-019</b>	<b>Raised By:</b>
<b>UR: Activate Service Order</b>	
<b>Current Flow:</b>	
This process takes place when new network or non-network services for an existing contract of an existing client have been created, activated or reactivated into Coheris CRM. The following actions must be performed by EAI: <ol style="list-style-type: none"> <li>Network services activation into WebPack,</li> <li>Services addition/Activation/reactivation into BSCS.</li> </ol>	
<b>Detailed Requirement:</b>	
Order Manager shall support services activation on an active contract of an existing client. When the order is received from CRM Generally, the below actions should be performed by OM: <ol style="list-style-type: none"> <li>Network services/resources activation through EMA.</li> </ol>	


Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

- b. Services Addition/Activation/reactivation through BSCS WebService.
- c. Inventory resources reservation.

If selected service is PBX:

1. Submit PBX provisioning request to EMA
2. Grouping PBX Master and Slave phone numbers in Inventory.
3. Add PBX service to each user contract in BSCS.

 Note:


<b>ID#: BIL-OCV-020</b>	<b>Raised By:</b>
<b>UR: Modify Service Order</b>	
<b>Current Flow:</b>	
N/A	
<b>Detailed Requirement:</b>	
Order Manager shall support to modify the current configuration of certain services.	
 Note:	


<b>ID#: BIL-OCV-021</b>	<b>Raised By:</b>
<b>UR: Deactivate Service Order</b>	
<b>Current Flow:</b>	
This process takes place when network or non-network services for an existing contract of an existing client have been deleted or deactivated into Coheris CRM. The following actions must be performed by EAI: <ul style="list-style-type: none"> <li>a. Network services suppression into WebPack,</li> <li>b. Services deletion/deactivation into BSCS.</li> </ul>	
<b>Detailed Requirement:</b>	
Order Manager shall support “Deactivate Service Order” when network or non-network services for an existing contract of an existing client have been deleted or deactivated into CRM and the order is posted to OM. The following actions must be performed by OM: <ul style="list-style-type: none"> <li>a. Network services deactivation through EMA.</li> <li>b. Services deletion/deactivation through BSCS web-service.</li> <li>c. Release Inventory Resources if any.</li> </ul>	


Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

If selected service is PBX:

1. Post de-provisioning requests to EMA
2. Update phone numbers reservation in XAKTA
3. Remove PBX service from affected contracts in BSCS.

 Note:

<b>ID#: BIL-OCV-022</b>	<b>Raised By:</b>
<b>UR: Line Blocking Order</b>	
<b>Current Flow:</b>  Currently line blocking order does not pass through the EAI.	
<b>Detailed Requirement:</b>  This process takes place when CRM posts a line blocking request to OM. As a result, OM shall perform the following actions: <ol style="list-style-type: none"> <li>a. Flag the contract as blocked</li> </ol>	
 Note:	

<b>ID#: BIL-OCV-023</b>	<b>Raised By:</b>
<b>UR: Line Un-Blocking Order</b>	
<b>Current Flow:</b>  Currently line un-blocking order does not pass through the EAI.	
<b>Detailed Requirement:</b>  This process takes place when CRM posts a line un-blocking request to OM. As a result, OM shall perform the following actions: <ol style="list-style-type: none"> <li>a. Remove the 'blocked' Flag on the active contract</li> </ol>	
 Note:	

<b>ID#: BIL-OCV-024</b>	<b>Raised By:</b>
<b>UR: Change Phone Number Order</b>	

Prepared (Subject resp)		No.		
Marwan Khoury		1029-FCP 132 1747		
Approved (Document resp)	Checked	Date	Rev	Reference
Ziad Hobeika		2018-07-10	D	

**Current Flow:**

This process takes place when the phone number for an existing contract of an existing client has changed inside Coheris CRM and the new phone number is on the same switch as the old one. The following actions must be performed by EAI:

1. Change Phone number of the user through WebPack.
2. Phone number status update into Circee.
3. Simple phone number change into Circee,
4. Phone number change into BSCS.

**Detailed Requirement:**

Order Manager shall support “Change Phone Number Order” when the phone number for an existing contract. And the order is posted to OM.

The following actions must be performed by OM:

- a. Set new phone number status to ‘B’ in Inventory.

Once all workorder are completed

- a. Set new phone number status to ‘Active’.
- b. Set old phone number to “Free”.
- c. If new switch is involved, reserve new line path in Inventory and release old line path. Deactivate the services on billing that are not available on the new switch.
- d. Update BSCS contract resource.

 Note:


<b>ID#: BIL-OCV-025</b>	<b>Raised By:</b>
<b>UR: Line Moving Same Switch Order</b>	
<b>Current Flow:</b> <p>This process takes places when a customer moves from one location to another and when its connection can stay on the same switch, then its phone number does not change. The following actions must be performed by OM:</p> <ol style="list-style-type: none"> <li>1. Call LineMovingActivation webservice of Circee</li> <li>2. Customer addresses change in BSCS</li> <li>3. Contract installation address change in BSCS.</li> </ol>	
<b>Detailed Requirement:</b> <p>Order Manager shall support “Line Moving Same Switch Order” when a customer moves from one location to another and when its connection can stay on the same switch. It is pre-required that:</p>	


Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

- CRM reserve the new line path prior to submitting this order to OM.
- The CRM forwards the old reserved line path object reference to OM.

The following actions must be performed by OM:

- Set the previous line path status to "Planned for Removal" in XAKTA.
- Update customer address in BSCS
- Update installation address in BSCS
- Apply line moving same switch fees to customer contract in BSCS.


 Note:

<b>ID#: BIL-OCV-026</b>	<b>Raised By:</b>
<b>UR: Line Termination Order</b>	
<b>Current Flow:</b>  This process takes place when the line of an existing client has been terminated in Coheris CRM. The following actions must be performed by OM: <ol style="list-style-type: none"> <li>Network line termination into WebPack</li> <li>Line release into Circee</li> <li>Contract deactivation into BSCS.</li> </ol>	
<b>Detailed Requirement:</b>  Order Manager shall support processing termination order received from CRM for PSTN/PES/ISDN/ADSL/DID lines. The following actions must be performed by OM: <ol style="list-style-type: none"> <li>Post de-provisioning requests to EMA for network nodes.</li> <li>Release line phone number in XAKTA.</li> <li>Deactivate contract in BSCS.</li> </ol>	
 Note:	

<b>ID#: BIL-OCV-027</b>	<b>Raised By:</b>
<b>UR: Bill on Demand order</b>	
<b>Current Flow:</b>  Currently, bill on demand order does not pass through order manager EAI.	
<b>Detailed Requirement:</b>  Order Manager shall support processing bill on demand request from CRM. OM shall perform the following operation for PES/PSTN/ISDN/DID/WCDMA, FTTB, Leased Line contracts: <ol style="list-style-type: none"> <li>Retrieve bill information to date of the contract from billing system.</li> </ol>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

 *Note:*


<b>ID#: BIL-OCV-028</b>	<b>Raised By:</b>
<b>UR: Call Details Order</b>	
<b>Current Flow:</b>  Currently, call details order does not pass through order manager EAI.	
<b>Detailed Requirement:</b>  Order Manager shall support process call details request from CRM. OM shall perform the following operation for PES/PSTN/ISDN/DID/WCDMA contracts: a. Retrieve outgoing calls details of the given contract.  The request from CRM shall include starting date and ending date so the calls in between this interval are retrieved from BSCS.	
 <i>Note:</i>	


<b>ID#: BIL-OCV-029</b>	<b>Raised By:</b>
<b>UR: Change Rate Plan Order</b>	
<b>Current Flow:</b>  This process takes place when the customer category is being changed to other type or the phone number type has changed to another one.  The following tasks must be performed by OM: 1. Update customer rate plan on Billing System 2. Add mandatory services for the migrated rate plan if applicable 3. Remove inapplicable services ported in from previous rate plan.	
<b>Detailed Requirement:</b>  This process takes place when the customer contract type is being changed to another type within the customer group. For instance, when changing from PSTN to ISDN or vice-versa.  The following tasks must be performed by OM when order is received from CRM: 1. Update customer rate plan on Billing System 2. Add mandatory services for the migrated rate plan if applicable 3. Remove inapplicable services ported in from previous rate plan.	




Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference


 Note:

<b>ID#: BIL-OCV-030</b>	<b>Raised By:</b>
<b>UR: Customer Personal Data Update Order</b>	
<b>Current Flow:</b>  This process takes place when the personal data associated to an existing customer has changed into CRM. The following actions must be performed by OM: <ol style="list-style-type: none"> <li>1. Customer personal data update into BSCS</li> <li>2. Customer addresses update into BSCS</li> </ol>	
<b>Detailed Requirement:</b>  This process takes place when the personal data associated to an existing customer has changed into CRM. The following actions must be performed by OM when order is received from CRM: <ol style="list-style-type: none"> <li>1. Customer personal data update into BSCS</li> <li>2. Customer addresses update into BSCS</li> </ol>	
 Note:	

<b>ID#: BIL-OCV-031</b>	<b>Raised By:</b>
<b>UR: Contract Takeover Order</b>	
<b>Current Flow:</b>  This process takes place when the owner (i.e. customer) of a line has changed into Coheris CRM (the customer has moved to another location and someone recovers the line. The following actions must be performed by OM: <ol style="list-style-type: none"> <li>1. Customer creation into BSCS, if a new customer recovers the line</li> <li>2. Contract takeover into BSCS</li> <li>3. Customer reference update into payment table of payment application</li> <li>4. Customer reference update into Coheris CRM (BSCS customer identifier).</li> </ol>	
<b>Detailed Requirement:</b>  This process takes place when the owner (i.e. customer) of a line has changed in CRM. OM shall perform the following tasks when this order is received from CRM: <ol style="list-style-type: none"> <li>a. Post contract takeover action from old owner to new owner to BSCS.</li> </ol> <p>The CSR shall create the new customer in CRM if it does not already exist.</p>	
 Note:	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

<b>ID#: BIL-OCV-032</b>	<b>Raised By:</b>
<b>UR: Deport Number Order.</b>	
<b>Current Flow:</b>  This process takes place when a customer asks to move his phone number outside his current switch while keeping the same phone number.	
<b>Detailed Requirement:</b>  Order Manager shall support “Deport Number Order” when a customer wants to move his phone number from one location to another whilst also changing switch. It is pre-required that: <ul style="list-style-type: none"> <li>• CRM reserve the new line path prior to submitting this order to OM.</li> <li>• The CRM forwards the old reserved line path object reference to OM.</li> </ul> The following actions must be performed by OM: <ol style="list-style-type: none"> <li>a. Update customer address in BSCS</li> <li>b. Update installation address in BSCS</li> <li>c. Set the previous line path status to “Planned for Removal” in XAKTA.</li> </ol>	
 <i>Note:</i>	

<b>ID#: BIL-OCV-033</b>	<b>Raised By:</b>
<b>UR: Distance Charge DFC Subscription</b>	
<b>Current Flow:</b>  This process takes place when a customer subscription requires cables more than the provided cable from ST, this service holds extra fees on the customer’s invoice. The following actions are performed by the OM: <ol style="list-style-type: none"> <li>1. Order Manager adds DFC service to the customer’s contract.</li> </ol>	
<b>Detailed Requirement:</b>  This process takes place when a customer subscription requires cables more than the provided cable from ST, this service holds extra fees on the customer’s invoice. The following actions are performed by the OM when order is received from CRM: <ol style="list-style-type: none"> <li>1. Order Manager adds DFC service to the customer’s contract.</li> </ol>	
 <i>Note:</i>	

<b>ID#: BIL-OCV-036</b>	<b>Raised By:</b>
<b>UR: Process Dunning Requests Suspension Orders</b>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

**Current Flow:**

N/A

**Detailed Requirement:**


As part of Debt Collection Workflow, contracts would need to be suspended. BSCS initiates the suspension requests towards the Order Manager providing the necessary information.


Order manager shall for each resource id (username, number, leased line) to be suspended:

- a. Retrieve the CSO and the switch related to the phone number from Inventory.
  - b. Group the resources per switch name.
- I. For requests that are destined to automatic switches:
    - i. Skip below steps in case a switch is configured NOT to receive provisioning requests.
    - ii. Select the resource ids from each switch group without exceeding the configured threshold of requests allowed for each switch per day.
    - iii. During a configurable time period (default is 23:59 to 8:30AM), submit the suspension batch requests to EMA.
    - iv. If the number of requests sent to a specific switch reached configurable threshold, Order Manager shall stop suspension requests that are destined to this switch. Also, Xakta and BSCS requests for these numbers belonging to this switch should be stopped. The counter of requests shall be reset each day by Order Manager.
  - II. For requests that are destined to manual switches:
    - i. Skip below steps in case a switch is configured NOT to receive provisioning requests.
    - ii. Select the resource ids from each switch group without exceeding the configured threshold of requests allowed for each switch per day.
    - iii. During a configurable time period (default is 23:59 to 8:30AM), generate list of suspension commands that should be executed on this switch using EMA web-services. In case the switch commands are not available on EMA, only phone numbers will be submitted to the next step without the suspension command.
    - iv. For each CSO, initiate a work-order on CRM using CSO name, switch name and downloadable link to the corresponding generated file.
    - v. CRM shall create an internal work-order that is destined to the switch team of the given CSO
    - vi. Once the switch team completes the work-order (run the commands on the manual switches), they should mark order as completed.
    - vii. CRM then posts request to Order Manager to suspend the reservation in Xakta and the contract in BSCS.
    - viii.

 Note:

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

<b>ID#: BIL-OCV-037</b>	<b>Raised By:</b>
<b>UR: FTTB Subscription Order.</b>	
<b>Current Flow:</b>  N/A	
<b>Detailed Requirement:</b> This process takes place when a FTTB subscription is created for a client into CRM. OM shall perform following steps when order is received from CRM: <ol style="list-style-type: none"> <li>Update Inventory Aktavara.</li> <li>Create contract with FTTB rate plan into BSCS.</li> <li>Add FTTB service to customer contract services.</li> </ol>	
 <i>Note:</i>	


<b>ID#: BIL-OCV-038</b>	<b>Raised By:</b>
<b>UR: FTTB Cancellation Order.</b>	
<b>Current Flow:</b>  	
<b>Detailed Requirement:</b> This process takes place when a FTTB subscription is terminated for a client into CRM. OM in the target architecture shall perform following steps: <ol style="list-style-type: none"> <li>Update Inventory.</li> <li>Deactivate FTTB contract for customer in BSCS.</li> </ol>	
 <i>Note:</i>	

<b>ID#: BIL-OCV-039</b>	<b>Raised By:</b>
<b>UR: GUI for Switches provisioning status</b>	
<b>Current Flow:</b>  N/A	
<b>Detailed Requirement:</b> Order Manager shall provide a GUI used by specific user group to add switch names that should be bypassed when process dunning requests from billing system.	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

Once a switch can receive provisioning requests again, its name shall be removed from the list by this user group.


 Note:

<b>ID#: BIL-OCV-040</b>	<b>Raised By:</b>
<b>UR: Line Moving New Switch Order</b>	
<b>Current Flow:</b>	
<b>Detailed Requirement:</b>	
<p>Order Manager shall support “Line Moving New Switch Order” when a customer moves from one location to another and when its connection should go through a new switch.</p> <p>It is pre-required that:</p> <ul style="list-style-type: none"> <li>• CRM reserve the new line path prior to submitting this order to OM.</li> <li>• The CRM forwards the old reserved line path object reference to OM.</li> </ul> <p>The following actions must be performed by OM:</p> <ol style="list-style-type: none"> <li>a. Modify the customer address in billing system</li> <li>b. Update phone number in contract</li> <li>c. Apply line moving operation one-time fee on the contract</li> <li>d. Configure automatic switches through EMA when applicable</li> <li>e. Deactivate services in billing that are not available in new switch.</li> <li>f. Activate reservation of new line path and remove the previous line path through XAKTA.</li> </ol>	
 Note:	


<b>ID#: BIL-OCV-041</b>	<b>Raised By:</b>
<b>UR: Process Dunning Requests Deactivation Orders</b>	
<b>Current Flow:</b>	
N/A	
<b>Detailed Requirement:</b>	
<p>As part of Debt Collection Workflow, contracts would need to be deactivated. BSCS initiates the deactivation requests towards the Order Manager providing the necessary information.</p> <p>Order manager shall for each resource id (username, number, leased line) to be deactivated:</p> <ol style="list-style-type: none"> <li>c. Retrieve the CSO and the switch related to the phone number from Inventory.</li> <li>d. Group the resources per switch name.</li> </ol>	

Prepared (Subject resp)		No.		
Marwan Khoury		1029-FCP 132 1747		
Approved (Document resp)	Checked	Date	Rev	Reference
Ziad Hobeika		2018-07-10	D	

- I. For requests that are destined to automatic switches:
  - i. Skip below steps in case a switch is configured NOT to receive provisioning requests.
  - ii. Select the numbers from each switch group without exceeding the configured threshold of requests allowed for each switch per day.
  - iii. During a configurable time period (default is 23:59 to 8:30AM), submit the batch requests to EMA.
  - iv. CRM shall delete resource reservation in Xakta and deactivate contract in BSCS.
  - v. Initiate a work-order in CRM using CSO name and customer resource id for cabling work.
  - vi. If the number of requests sent to a specific switch reached configurable threshold, Order Manager shall stop deactivation requests that are destined to this switch. Also, Xakta, Cabling and BSCS requests for these numbers belonging to this switch should be stopped. The counter of requests shall be reset each day by Order Manager.
- II. For requests that are destined to manual switches:
  - i. Skip below steps in case a switch is configured NOT to receive provisioning requests.
  - ii. Select the numbers from each switch group without exceeding the configured threshold of requests allowed for each switch per day.
  - iii. During a configurable time period (default is 23:59 to 8:30AM), generate list of deactivation commands that should be executed on this switch using EMA web-services. In case the switch commands are not available on EMA, only phone numbers will be submitted to the next step without the deactivation command.
  - iv. For each CSO, initiate a work-order on CRM using CSO name, switch name and downloadable link to the corresponding generated file.
  - v. CRM shall create an internal work-order that is destined to the switch team of the given CSO
  - vi. Once the switch team completes the work-order (run the commands on the manual switches), they should mark order as completed.
  - vii. CRM shall post to Order Manager to delete resource reservation in Xakta and deactivate contract in BSCS.
  - viii. The order is then forwarded to cabling team (MDF/Cabinet/DP) to remove physical connections.
  - ix. If the number of requests sent to a specific switch reached configurable threshold, Order Manager shall stop deactivation requests that are destined to this switch. Also, Xakta, Cabling and BSCS requests for these numbers belonging to this switch should be stopped. The counter of requests shall be reset each day by Order Manager.

 Note:

Prepared (Subject resp)		No.		
Marwan Khoury		1029-FCP 132 1747		
Approved (Document resp)	Checked	Date	Rev	Reference
Ziad Hobeika		2018-07-10	D	

<b>ID#: BIL-OCV-042</b>	<b>Raised By:</b>
<b>UR: Process Dunning Requests Activation from Suspension Orders</b>	
<b>Current Flow:</b>  N/A	
<b>Detailed Requirement:</b>  Once unpaid fees for a suspended contract are paid, dunning process from BSCS submits an activation request towards order manager to activate the customer contract.  At this point, Order manager shall for each resource id (username, telephone number, leased line) to be activated: <ol style="list-style-type: none"> <li>For requests that are destined to automatic switches: <ol style="list-style-type: none"> <li>Execute activation command via EMA to the switch for the telephony and ADSL resources where applicable.</li> <li>Activate the related contract in BSCS.</li> </ol> </li> <li>For requests that are destined to manual switches: <ol style="list-style-type: none"> <li>Generate activation commands file that should be executed on the manual switches using EMA web-services. In case the switch commands are not available on EMA, only phone numbers will be submitted to the next step without the activation command.</li> <li>Retrieve the CSO of the switch name from Inventory.</li> <li>Initiate a work-order on CRM using CSO name, switch name and downloadable link to the corresponding generated file.</li> <li>CRM shall create an internal work-order that is destined to the switch team of the given CSO</li> <li>Once the switch team completes the work-order (run the commands on the manual switches), they should mark order as completed.</li> <li>CRM submits an activation command towards order manager with the resource id related to this work-order.</li> <li>Order Manager activates the related contract in BSCS.</li> </ol> </li> </ol>	
 <i>Note:</i>	

<b>ID#: BIL-OCV-043</b>	<b>Raised By:</b>
<b>UR: Functionalities exposed via API</b>	
<b>Current Flow:</b>  N/A	

Prepared (Subject resp)		No.		
Marwan Khoury		1029-FCP 132 1747		
Approved (Document resp)	Checked	Date	Rev	Reference
Ziad Hobeika		2018-07-10	D	

### Detailed Requirement:

Order Manager shall provide the support for API calls from external systems to provide the below services:

- Test Line:

Test line action returns the voltage on the line. This is only applicable for the switches which support it.

- Get Line Path Status

The line path status shall be returned from Inventory containing whether an MDF, Switch, DSLAM, Cabinet primary port, Cabinet secondary port status is OK or has fault. The inventory shall be updated by Technical Teams.


- Get Device Status

The device status is retrieved from the exchange. This is only applicable for the switches which support it.

- Check active services

Check the active services for a specific directory number on the switch.

To note that the User Interface that is responsible of consuming the above commands is not part of this requirement.

 Note:

## 2.4.2 Big Data Analytics and Business Intelligence

<b>ID#: BIL-BDA-001</b>	<b>Raised By: -</b>
<b>UR: External requests count report</b>	
<b>Current Flow:</b>	
N/A	



Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

**Detail Requirement: -**

System shall support the generation of a report displaying all counters from BIL to all systems (Counter on BSCS, EMA, Inventory, and CRM)

 *Note:*

**ID#: BIL-BDA-002**
**Raised By: -**
**UR: External requests count detailed report**
**Current Flow:**

N/A

**Detail Requirement: -**

System shall support the generation of a report displaying all counters from BIL to all systems (BSCS, EMA, Inventory, and CRM) including the process, Operation and sub process of each workflow

 *Note:*

**ID#: BIL-BDA-003**
**Raised By: -**
**UR: BIL Operations and Process logging**
**Current Flow:**

N/A

**Detail Requirement: -**

System shall provide interface for viewing the processes logging for each operation

Details shall be provided with the below Fields:

Process date and time

Level (information, warning, error)

Process

Operation


Message

Status (Completed (successful), Aborted (failed), New, Started).

Filtration can be applied to all of the fields mentioned above.

 *Note:*

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

<b>ID#: BIL-BDA-004</b>	<b>Raised By: -</b>
<b>UR: Subscriptions and Services details report</b>	
<b>Current Flow:</b>  N/A	
<b>Detail Requirement:</b>  System shall provide interface for viewing the subscriptions and Services details within the system.  Filtration and grouping shall be provided with the below Fields: a- Province b- CSO c- Event type d- Date period e- Service Name  Details shall be provided with the below Fields: a- Province b- CSO c- Event type (subscription, Service addition) d- Service e- Total Attempts f- Successful attempts g- Failed Attempts	
 <i>Note:</i>	

<b>ID#: BIL-BDA-005</b>	<b>RAISED BY: -</b>
<b>UR: Change username/password operations for ADSL</b>	
<b>Current Flow:</b>  	
<b>Detailed Requirement:</b>  A report about Change Username/Password for ADSL contract in CSO during a specified period shall be provided from BIL. Details shall be provided with the below Fields: a- Province b- CSO c- Event(ADSL -Change Username/Password)	


Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference


d- Date Period  
e- Total Attempts  
f- Successful attempts  
g- Failed Attempts


 *Note:*

Prepared (Subject resp)		No.		
Marwan Khoury		1029-FCP 132 1747		
Approved (Document resp)	Checked	Date	Rev	Reference
Ziad Hobeika		2018-07-10	D	

### 2.4.3 Non-Functional Requirements

<b>ID#: BIL-NFR-001</b>	<b>Raised By:</b>
<b>UR: High Availability</b>	
<b>Detailed Requirement:</b>  OM in the target architecture shall ensure highly available service: where in the case of the loss of a total of one physical hardware resource or one software resource, the service should not be affected.	
 <i>Note:</i>	

<b>ID#: BIL-NFR-003</b>	<b>Raised By:</b>
<b>UR: Incoming Traffic Load Balancing</b>	
<b>Detailed Requirement:</b>  OM in the target architecture can receive incoming requests in a load balanced fashion. This can be ensured using software load-balancer.	
 <i>Note:</i>	

<b>ID#: BIL-NFR-004</b>	<b>Raised By:</b>
<b>UR: Traffic Orchestration</b>	
<b>Detailed Requirement:</b>  OM in the target architecture shall be able, if applicable, to orchestrate traffic across the external nodes that are involved to achieve the completion of an order.	
 <i>Note:</i>	

## 2.5 Architectural Block EMA

### 2.5.1 Service & Resource Orchestration


<b>ID#: EMA-SRO-001</b>	<b>Raised By:</b>
<b>UR: Provisioning AXE Switches</b>	
<b>Current Flow:</b>	


Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

- CRM (provisions Test line, Test tone, Get Meter) and EAI (provisions all the remaining operations) are the only northbound systems which send provisioning requests to Webpack
- There are 67 AXE switches which are provisioned (activation and dunning) either manually or automatically through Webpack.
- The automatic provisioning is established through the existing OMCs which are OSS-RC nodes.

**Detailed Requirement:**

- The Provisioning system will provision the Ericsson switches through the OSS-RC. Therefore, there will be a direct connection between the Provisioning system and the existing OSS-RC nodes which in turn must be connected to all the existing AXE switches.

 *Note:*

<b>ID#: EMA-SRO-002</b>	<b>Raised By:</b>
<b>UR: Create ISDN for AXE Switches</b>	
<b>Current Flow:</b> <ul style="list-style-type: none"> <li>• CRM is the only northbound systems which sends ISDN Creation requests to Webpack</li> <li>• The automatic provisioning is established through the existing OMCs which are OSS-RC nodes.</li> </ul>	
<b>Detailed Requirement:</b> <ul style="list-style-type: none"> <li>• A defined northbound interface will be the only initiator for provisioning ISDN Creation requests towards the Provisioning system</li> <li>• The target system will use the Provisioning system as single point of provisioning ISDN Creation requests towards the Ericsson switches</li> </ul>	
<p> <i>Note: Some requests are provisioned manually on the switches which are not connected to the OMCs; thus, they are excluded from this requirement</i></p>	

<b>ID#: EMA-SRO-003</b>	<b>Raised By:</b>
<b>UR: Add Services to ISDN subscriber for AXE Switches</b>	
<b>Current Flow:</b> <ul style="list-style-type: none"> <li>• CRM is the only northbound systems which sends Add Service requests to Webpack</li> </ul>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

- The automatic provisioning is established through the existing OMCs which are OSS-RC nodes.

**Detailed Requirement:**

- A defined northbound interface will be the only initiator for Add Service provisioning requests towards the Provisioning system
- The target system will use the Provisioning system as single point of provisioning ISDN Add Service requests towards the Ericsson switches
- The supported services are the ones listed in the Reference 13

*Note: Some requests are provisioned manually on the switches which are not connected to the OMCs; thus, they are excluded from this requirement*

<b>ID#: EMA-SRO-004</b>	<b>Raised By:</b>
<b>UR: Delete Services from ISDN subscriber for AXE Switches</b>	
<b>Current Flow:</b> <ul style="list-style-type: none"> <li>CRM is the only northbound systems which sends Delete Service requests to Webpack</li> <li>The automatic provisioning is established through the existing OMCs which are OSS-RC nodes.</li> </ul>	
<b>Detailed Requirement:</b> <ul style="list-style-type: none"> <li>A defined northbound interface will be the only initiator for Delete Service provisioning requests towards the Provisioning system</li> <li>The target system will use the Provisioning system as single point of provisioning ISDN Delete Service requests towards the Ericsson switches</li> <li>The supported services are the ones listed in the Reference 13</li> </ul>	
<i>Note: Some requests are provisioned manually on the switches which are not connected to the OMCs; thus, they are excluded from this requirement</i>	

<b>ID#: EMA-SRO-005</b>	<b>Raised By:</b>
<b>UR: Delete ISDN subscriber for AXE Switches</b>	
<b>Current Flow:</b> <ul style="list-style-type: none"> <li>CRM is the only northbound systems which sends ISDN Deletion requests to Webpack</li> </ul>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

- The automatic provisioning is established through the existing OMCs which are OSS-RC nodes.

**Detailed Requirement:**

- A defined northbound interface will be the only initiator for ISDN Deletion provisioning requests towards the Provisioning system
- The target system will use the Provisioning system as single point of provisioning ISDN Deletion requests towards the Ericsson switches

*Note: Some requests are provisioned manually on the switches which are not connected to the OMCs; thus, they are excluded from this requirement*

<b>ID#: EMA-SRO-006</b>	<b>Raised By:</b>
<b>UR: Create PABX ISDN for AXE Switches</b>	
<b>Current Flow:</b> <ul style="list-style-type: none"> <li>CRM is the only northbound systems which sends PABX ISDN Creation requests to Webpack</li> <li>The automatic provisioning is established through the existing OMCs which are OSS-RC nodes.</li> </ul>	
<b>Detailed Requirement:</b> <ul style="list-style-type: none"> <li>A defined northbound interface will be the only initiator for PABX Creation provisioning requests towards the Provisioning system</li> <li>The target system will use the Provisioning system as single point of provisioning PABX ISDN Creation requests towards the Ericsson switches</li> </ul>	
<i>Note: Some requests are provisioned manually on the switches which are not connected to the OMCs; thus, they are excluded from this requirement</i>	

<b>ID#: EMA-SRO-007</b>	<b>Raised By:</b>
<b>UR: Add Line to PABX ISDN for AXE Switches</b>	
<b>Current Flow:</b> <ul style="list-style-type: none"> <li>CRM is the only northbound systems which sends ISDN PABX Add Line requests to Webpack</li> <li>The automatic provisioning is established through the existing OMCs which are OSS-RC nodes.</li> </ul>	

Prepared (Subject resp)		No.		
Marwan Khoury		1029-FCP 132 1747		
Approved (Document resp)	Checked	Date	Rev	Reference
Ziad Hobeika		2018-07-10	D	

**Detailed Requirement:**

- A defined northbound interface will be the only initiator for ISDN PABX Add Line provisioning requests towards the Provisioning system
- The target system will use the Provisioning system as single point of provisioning ISDN PABX Add Line requests towards the Ericsson switches

*Note: Some requests are provisioned manually on the switches which are not connected to the OMCs; thus, they are excluded from this requirement*

<b>ID#: EMA-SRO-008</b>	<b>Raised By:</b>
<b>UR: Delete Line from PABX ISDN for AXE Switches</b>	
<b>Current Flow:</b> <ul style="list-style-type: none"> <li>• CRM is the only northbound systems which sends ISDN PABX Delete Line requests to Webpack</li> <li>• The automatic provisioning is established through the existing OMCs which are OSS-RC nodes.</li> </ul>	
<b>Detailed Requirement:</b> <ul style="list-style-type: none"> <li>• A defined northbound interface will be the only initiator for ISDN PABX Delete Line provisioning requests towards the Provisioning system</li> <li>• The target system will use the Provisioning system as single point of provisioning ISDN PABX Delete Line requests towards the Ericsson switches</li> </ul>	
<i>Note: Some requests are provisioned manually on the switches which are not connected to the OMCs; thus, they are excluded from this requirement</i>	

<b>ID#: EMA-SRO-009</b>	<b>Raised By:</b>
<b>UR: Delete PABX ISDN for AXE Switches</b>	
<b>Current Flow:</b> <ul style="list-style-type: none"> <li>• CRM is the only northbound systems which sends PABX ISDN Deletion requests to Webpack</li> <li>• The automatic provisioning is established through the existing OMCs which are OSS-RC nodes.</li> </ul>	



Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

**Detailed Requirement:**

- A defined northbound interface will be the only initiator for PABX Deletion provisioning requests towards the Provisioning system
- The target system will use the Provisioning system as single point of provisioning PABX ISDN Deletion requests towards the Ericsson switches

*Note: Some requests are provisioned manually on the switches which are not connected to the OMCs; thus, they are excluded from this requirement*

<b>ID#: EMA-SRO-010</b>	<b>Raised By:</b>
<b>UR: ISDN Others Operations for AXE Switches</b>	
<b>Current Flow:</b> <ul style="list-style-type: none"> <li>• CRM is the only northbound systems which sends ISDN “Others” requests to Webpack</li> <li>• The automatic provisioning is established through the existing OMCs which are OSS-RC nodes.</li> </ul>	
<b>Detailed Requirement:</b> <ul style="list-style-type: none"> <li>• ISDN “Others” operations are: Test Line, Test Device, Test Tone, Get Meter, Get Device Status, Get Line Status, and Reset Keyword</li> <li>• A defined northbound interface will be the only initiator for ISDN “Others” provisioning requests towards the Provisioning system</li> <li>• The target system will use the Provisioning system as single point of provisioning ISDN “Others” requests towards the Ericsson switches</li> </ul>	
<i>Note: Some requests are provisioned manually on the switches which are not connected to the OMCs; thus, they are excluded from this requirement</i>	

<b>ID#: EMA-SRO-011</b>	<b>Raised By:</b>
<b>UR: Create PSTN for AXE Switches</b>	
<b>Current Flow:</b> <ul style="list-style-type: none"> <li>• CRM is the only northbound systems which sends PSTN Creation requests to Webpack</li> <li>• The automatic provisioning is established through the existing OMCs which are OSS-RC nodes.</li> </ul>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

**Detailed Requirement:**

- A defined northbound interface will be the only initiator for provisioning PSTN Creation requests towards the Provisioning system
- The target system will use the Provisioning system as single point of provisioning PSTN Creation requests towards the Ericsson switches

*Note: Some requests are provisioned manually on the switches which are not connected to the OMCs; thus, they are excluded from this requirement*

<b>ID#: EMA-SRO-012</b>	<b>Raised By:</b>
<b>UR: Add Services to PSTN subscriber for AXE Switches</b>	
<b>Current Flow:</b> <ul style="list-style-type: none"> <li>• CRM is the only northbound systems which sends Add Service requests to Webpack</li> <li>• The automatic provisioning is established through the existing OMCs which are OSS-RC nodes.</li> </ul>	
<b>Detailed Requirement:</b> <ul style="list-style-type: none"> <li>• A defined northbound interface will be the only initiator for PSTN Add Service provisioning requests towards the Provisioning system</li> <li>• The target system will use the Provisioning system as single point of provisioning PSTN Add Service requests towards the Ericsson switches</li> <li>• The supported services are the ones listed in the Reference 13</li> </ul>	
<i>Note: Some requests are provisioned manually on the switches which are not connected to the OMCs; thus, they are excluded from this requirement</i>	

<b>ID#: EMA-SRO-013</b>	<b>Raised By:</b>
<b>UR: Delete Services from PSTN subscriber for AXE Switches</b>	
<b>Current Flow:</b> <ul style="list-style-type: none"> <li>• CRM is the only northbound systems which sends Delete Service requests to Webpack</li> <li>• The automatic provisioning is established through the existing OMCs which are OSS-RC nodes.</li> </ul>	

Prepared (Subject resp)		No.		
Marwan Khoury		1029-FCP 132 1747		
Approved (Document resp)	Checked	Date	Rev	Reference
Ziad Hobeika		2018-07-10	D	

**Detailed Requirement:**

- A defined northbound interface will be the only initiator for PSTN Delete Service provisioning requests towards the Provisioning system
- The target system will use the Provisioning system as single point of provisioning PSTN Delete Service requests towards the Ericsson switches
- The supported services are the ones listed in the Reference 13

*Note: Some requests are provisioned manually on the switches which are not connected to the OMCs; thus, they are excluded from this requirement*

<b>ID#: EMA-SRO-014</b>	<b>Raised By:</b>
<b>UR: Delete PSTN subscriber for AXE Switches</b>	
<b>Current Flow:</b> <ul style="list-style-type: none"> <li>• CRM is the only northbound systems which sends PSTN Deletion requests to Webpack</li> <li>• The automatic provisioning is established through the existing OMCs which are OSS-RC nodes.</li> </ul>	
<b>Detailed Requirement:</b> <ul style="list-style-type: none"> <li>• A defined northbound interface will be the only initiator for PSTN Deletion provisioning requests towards the Provisioning system</li> <li>• The target system will use the Provisioning system as single point of provisioning PSTN Deletion requests towards the Ericsson switches</li> </ul> <p><i>Note: Some requests are provisioned manually on the switches which are not connected to the OMCs; thus, they are excluded from this requirement</i></p>	

<b>ID#: EMA-SRO-015</b>	<b>Raised By:</b>
<b>UR: Create PABX PSTN for AXE Switches</b>	
<b>Current Flow:</b> <ul style="list-style-type: none"> <li>• CRM is the only northbound systems which sends PABX PSTN Creation requests to Webpack</li> <li>• The automatic provisioning is established through the existing OMCs which are OSS-RC nodes.</li> </ul>	
<b>Detailed Requirement:</b>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

- A defined northbound interface will be the only initiator for PSTN PABX Creation provisioning requests towards the Provisioning system
- The target system will use the Provisioning system as single point of provisioning PSTN PABX Creation requests towards the Ericsson switches

*Note: Some requests are provisioned manually on the switches which are not connected to the OMCs; thus, they are excluded from this requirement*

<b>ID#: EMA-SRO-016</b>	<b>Raised By:</b>
<b>UR: Add Line to PABX PSTN for AXE Switches</b>	
<b>Current Flow:</b> <ul style="list-style-type: none"> <li>• CRM is the only northbound systems which sends PSTN PABX Add Line requests to Webpack</li> <li>• The automatic provisioning is established through the existing OMCs which are OSS-RC nodes.</li> </ul>	
<b>Detailed Requirement:</b> <ul style="list-style-type: none"> <li>• A defined northbound interface will be the only initiator for PSTN PABX Add Line provisioning requests towards the Provisioning system</li> <li>• The target system will use the Provisioning system as single point of provisioning PSTN PABX Add Line requests towards the Ericsson switches</li> </ul>	
<i>Note: Some requests are provisioned manually on the switches which are not connected to the OMCs; thus, they are excluded from this requirement</i>	

<b>ID#: EMA-SRO-017</b>	<b>Raised By:</b>
<b>UR: Delete PABX PSTN from AXE Switches</b>	
<b>Current Flow:</b> <ul style="list-style-type: none"> <li>• CRM is the only northbound systems which sends PABX PSTN Deletion requests to Webpack</li> <li>• The automatic provisioning is established through the existing OMCs which are OSS-RC nodes.</li> </ul>	
<b>Detailed Requirement:</b> <ul style="list-style-type: none"> <li>• A defined northbound interface will be the only initiator for PABX PSTN Deletion provisioning requests towards the Provisioning system</li> </ul>	

Prepared (Subject resp)		No.		
Marwan Khoury		1029-FCP 132 1747		
Approved (Document resp)	Checked	Date	Rev	Reference
Ziad Hobeika		2018-07-10	D	

- The target system will use the Provisioning system as single point of provisioning PABX PSTN Deletion requests towards the Ericsson switches

*Note: Some requests are provisioned manually on the switches which are not connected to the OMCs; thus, they are excluded from this requirement*

<b>ID#: EMA-SRO-018</b>	<b>Raised By:</b>
<b>UR: Delete Line from PABX PSTN AXE Switches</b>	
<b>Current Flow:</b> <ul style="list-style-type: none"> <li>CRM is the only northbound systems which sends PSTN PABX Delete Line requests to Webpack</li> <li>The automatic provisioning is established through the existing OMCs which are OSS-RC nodes.</li> </ul>	
<b>Detailed Requirement:</b> <ul style="list-style-type: none"> <li>A defined northbound interface will be the only initiator for PSTN PABX Delete Line provisioning requests towards the Provisioning system</li> <li>The target system will use the Provisioning system as single point of provisioning PSTN PABX Delete Line requests towards the Ericsson switches</li> </ul>	
<i>Note: Some requests are provisioned manually on the switches which are not connected to the OMCs; thus, they are excluded from this requirement</i>	

<b>ID#: EMA-SRO-019</b>	<b>Raised By:</b>
<b>UR: Create WCDMAPSTN for AXE Switches</b>	
<b>Current Flow:</b> <ul style="list-style-type: none"> <li>CRM is the only northbound systems which sends WCDMAPSTN Creation requests to Webpack</li> <li>The automatic provisioning is established through the existing OMCs which are OSS-RC nodes.</li> </ul>	
<b>Detailed Requirement:</b> <ul style="list-style-type: none"> <li>A defined northbound interface will be the only initiator for provisioning WCDMAPSTN Creation requests towards the Provisioning system</li> <li>The target system will use the Provisioning system as single point of provisioning WCDMAPSTN Creation requests towards the Ericsson switches</li> </ul>	


Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference


*Note: Some requests are provisioned manually on the switches which are not connected to the OMCs; thus, they are excluded from this requirement*

<b>ID#: EMA-SRO-020</b>	<b>Raised By:</b>
<b>UR: Delete WCDMAPSTN subscriber from AXE Switches</b>	
<b>Current Flow:</b> <ul style="list-style-type: none"> <li>CRM is the only northbound systems which sends WCDMAPSTN Deletion requests to Webpack</li> <li>The automatic provisioning is established through the existing OMCs which are OSS-RC nodes.</li> </ul>	
<b>Detailed Requirement:</b> <ul style="list-style-type: none"> <li>A defined northbound interface will be the only initiator for WCDMAPSTN Deletion provisioning requests towards the Provisioning system</li> <li>The target system will use the Provisioning system as single point of provisioning WCDMAPSTN Deletion requests towards the Ericsson switches</li> </ul>	
<i>Note: Some requests are provisioned manually on the switches which are not connected to the OMCs; thus, they are excluded from this requirement</i>	

<b>ID#: EMA-SRO-021</b>	<b>Raised By:</b>
<b>UR: GET WCDMAPSTN Device Status for AXE Switches</b>	
<b>Current Flow:</b> <ul style="list-style-type: none"> <li>CRM is the only northbound systems which sends WCDMAPSTN GET requests to Webpack</li> <li>The automatic provisioning is established through the existing OMCs which are OSS-RC nodes.</li> </ul>	
<b>Detailed Requirement:</b> <ul style="list-style-type: none"> <li>A defined northbound interface will be the only initiator for WCDMAPSTN GET provisioning requests towards the Provisioning system</li> <li>The target system will use the Provisioning system as single point of provisioning WCDMAPSTN GET requests towards the Ericsson switches</li> </ul>	
<i>Note: Some requests are provisioned manually on the switches which are not connected to the OMCs; thus, they are excluded from this requirement</i>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

<b>ID#: EMA-SRO-022</b>	<b>Raised By:</b>
<b>UR: Rollback for AXE Switches</b>	
<b>Current Flow:</b> <ul style="list-style-type: none"><li>Rollback is secured either by Webpack or by CRM</li></ul>	
<b>Detailed Requirement:</b> <ul style="list-style-type: none"><li>The provisioning system will secure rollback in case several southbound requests (sent by the provisioning system) were triggered by a single northbound request. For example, northbound system will send a request for Adding Profile X, the provisioning system will be responsible to add/activate multiple services for the subscriber by sending multiple MML requests. In case of failure while adding/activating any of the services, then the provisioning system will rollback the prior request(s) to their initial status.</li></ul>	
 <i>Note:</i>	

<b>ID#: EMA-SRO-023</b>	<b>Raised By:</b>
<b>UR: Provisioning EWSD Switches</b>	
<b>Current Flow:</b> <ul style="list-style-type: none"><li>CRM (provisions Test line, Test tone, Get Meter) and EAI (provisions all the remaining operations) are the only northbound systems which send provisioning requests to Webpack</li><li>There are 135 EWSD switches which are provisioned (activation and dunning) either manually or automatically through Webpack.</li><li>The automatic provisioning is established through the existing NetManager.</li></ul>	
<b>Detailed Requirement:</b> <ul style="list-style-type: none"><li>The Provisioning system will provision the Siemens switches through the NetManager. Therefore, there will be a direct connection between the Provisioning system and the existing NetManager which in turn must be connected to all the existing EWSD switches.</li></ul>	
 <i>Note:</i>	

<b>ID#: EMA-SRO-024</b>	<b>Raised By:</b>
<b>UR: Create ISDN for EWSD Switches</b>	

Prepared (Subject resp)		No.		
Marwan Khoury		1029-FCP 132 1747		
Approved (Document resp)	Checked	Date	Rev	Reference
Ziad Hobeika		2018-07-10	D	

**Current Flow:**

- CRM is the only northbound systems which sends ISDN Creation requests to Webpack
- The automatic provisioning is established through the existing OMCs which are NetManager nodes.

**Detailed Requirement:**

- A defined northbound interface will be the only initiator for provisioning ISDN Creation requests towards the Provisioning system
- The target system will use the Provisioning system as single point of provisioning ISDN Creation requests towards the EWSD switches

*Note: Some requests are provisioned manually on the switches which are not connected to the OMCs; thus, they are excluded from this requirement*

<b>ID#: EMA-SRO-025</b>	<b>Raised By:</b>
<b>UR: Add Services to ISDN subscriber for EWSD Switches</b>	
<b>Current Flow:</b>	
<ul style="list-style-type: none"> <li>• CRM is the only northbound systems which sends Add Service requests to Webpack</li> <li>• The automatic provisioning is established through the existing OMCs which are NetManager nodes.</li> </ul>	
<b>Detailed Requirement:</b>	
<ul style="list-style-type: none"> <li>• A defined northbound interface will be the only initiator for Add Service provisioning requests towards the Provisioning system</li> <li>• The target system will use the Provisioning system as single point of provisioning ISDN Add Service requests towards the EWSD switches</li> <li>• The supported services are the ones listed in the Reference 13</li> </ul>	
<i>Note: Some requests are provisioned manually on the switches which are not connected to the OMCs; thus, they are excluded from this requirement</i>	

<b>ID#: EMA-SRO-026</b>	<b>Raised By:</b>
<b>UR: Delete Services from ISDN subscriber for EWSD Switches</b>	



Prepared (Subject resp)		No.		
Marwan Khoury		1029-FCP 132 1747		
Approved (Document resp)	Checked	Date	Rev	Reference
Ziad Hobeika		2018-07-10	D	

**Current Flow:**

- CRM is the only northbound systems which sends Delete Service requests to Webpack
- The automatic provisioning is established through the existing OMCs which are NetManager nodes.

**Detailed Requirement:**

- A defined northbound interface will be the only initiator for Delete Service provisioning requests towards the Provisioning system
- The target system will use the Provisioning system as single point of provisioning ISDN Delete Service requests towards the EWSD switches
- The supported services are the ones listed in the Reference 13

*Note: Some requests are provisioned manually on the switches which are not connected to the OMCs; thus, they are excluded from this requirement*

**ID#: EMA-SRO-027**
**Raised By:**
**UR: Delete ISDN subscriber from EWSD Switches**
**Current Flow:**

- CRM is the only northbound systems which sends ISDN Deletion requests to Webpack
- The automatic provisioning is established through the existing OMCs which are NetManager nodes.

**Detailed Requirement:**

- A defined northbound interface will be the only initiator for ISDN Deletion provisioning requests towards the Provisioning system
- The target system will use the Provisioning system as single point of provisioning ISDN Deletion requests towards the EWSD switches

*Note: Some requests are provisioned manually on the switches which are not connected to the OMCs; thus, they are excluded from this requirement*

**ID#: EMA-SRO-028**
**Raised By:**
**UR: Create PABX ISDN for EWSD Switches**
**Current Flow:**

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

- CRM is the only northbound systems which sends PABX ISDN Creation requests to Webpack
- The automatic provisioning is established through the existing OMCs which are NetManager nodes.

**Detailed Requirement:**

- A defined northbound interface will be the only initiator for PABX ISDN Creation provisioning requests towards the Provisioning system
- The target system will use the Provisioning system as single point of provisioning PABX ISDN Creation requests towards the EWSD switches

*Note: Some requests are provisioned manually on the switches which are not connected to the OMCs; thus, they are excluded from this requirement*

<b>ID#: EMA-SRO-029</b>	<b>Raised By:</b>
<b>UR: Add Line to PABX ISDN for EWSD Switches</b>	
<b>Current Flow:</b> <ul style="list-style-type: none"> <li>• CRM is the only northbound systems which sends ISDN PABX Add Line requests to Webpack</li> <li>• The automatic provisioning is established through the existing OMCs which are NetManager nodes.</li> </ul>	
<b>Detailed Requirement:</b> <ul style="list-style-type: none"> <li>• A defined northbound interface will be the only initiator for PABX ISDN Add Line provisioning requests towards the Provisioning system</li> <li>• The target system will use the Provisioning system as single point of provisioning ISDN PABX Add Line requests towards the EWSD switches</li> </ul>	
<i>Note: Some requests are provisioned manually on the switches which are not connected to the OMCs; thus, they are excluded from this requirement</i>	

<b>ID#: EMA-SRO-030</b>	<b>Raised By:</b>
<b>UR: Delete Line from PABX ISDN for EWSD Switches</b>	
<b>Current Flow:</b> <ul style="list-style-type: none"> <li>• CRM is the only northbound systems which sends ISDN PABX Delete Line requests to Webpack</li> </ul>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

- The automatic provisioning is established through the existing OMCs which are NetManager nodes.

**Detailed Requirement:**

- A defined northbound interface will be the only initiator for PABX ISDN Delete Line provisioning requests towards the Provisioning system
- The target system will use the Provisioning system as single point of provisioning ISDN PABX Delete Line requests towards the EWSD switches

*Note: Some requests are provisioned manually on the switches which are not connected to the OMCs; thus, they are excluded from this requirement*

<b>ID#: EMA-SRO-031</b>	<b>Raised By:</b>
<b>UR: Delete PABX ISDN for EWSD Switches</b>	
<b>Current Flow:</b> <ul style="list-style-type: none"> <li>CRM is the only northbound systems which sends PABX ISDN Deletion requests to Webpack</li> <li>The automatic provisioning is established through the existing OMCs which are NetManager nodes.</li> </ul>	
<b>Detailed Requirement:</b> <ul style="list-style-type: none"> <li>A defined northbound interface will be the only initiator for PABX ISDN Deletion provisioning requests towards the Provisioning system</li> <li>The target system will use the Provisioning system as single point of provisioning PABX ISDN Deletion requests towards the EWSD switches</li> </ul>	
<i>Note: Some requests are provisioned manually on the switches which are not connected to the OMCs; thus, they are excluded from this requirement</i>	

<b>ID#: EMA-SRO-032</b>	<b>Raised By:</b>
<b>UR: ISDN Other Operations for EWSD Switches</b>	
<b>Current Flow:</b> <ul style="list-style-type: none"> <li>CRM is the only northbound systems which sends ISDN “Others” requests to Webpack</li> <li>The automatic provisioning is established through the existing OMCs which are NetManager nodes.</li> </ul>	

Prepared (Subject resp)		No.		
Marwan Khoury		1029-FCP 132 1747		
Approved (Document resp)	Checked	Date	Rev	Reference
Ziad Hobeika		2018-07-10	D	

**Detailed Requirement:**

- ISDN “Others” operations are: Test Line, Test Device, Test Tone, Get Meter, Get Device Status, Get Line Status, and Reset Keyword
- A defined northbound interface will be the only initiator for ISDN “Others” provisioning requests towards the Provisioning system
- The target system will use the Provisioning system as single point of provisioning ISDN “Others” requests towards the EWSD switches

*Note: Some requests are provisioned manually on the switches which are not connected to the OMCs; thus, they are excluded from this requirement*

<b>ID#: EMA-SRO-033</b>	<b>Raised By:</b>
<b>UR: Create PSTN EWSD Switches</b>	
<b>Current Flow:</b>	
<ul style="list-style-type: none"> <li>• CRM is the only northbound systems which sends PSTN Creation requests to Webpack</li> <li>• The automatic provisioning is established through the existing OMCs which are NetManager nodes.</li> </ul>	
<b>Detailed Requirement:</b>	
<ul style="list-style-type: none"> <li>• A defined northbound interface will be the only initiator for provisioning PSTN Creation requests towards the Provisioning system</li> <li>• The target system will use the Provisioning system as single point of provisioning PSTN Creation requests towards the EWSD switches</li> </ul>	
<i>Note: Some requests are provisioned manually on the switches which are not connected to the OMCs; thus, they are excluded from this requirement</i>	

<b>ID#: EMA-SRO-034</b>	<b>Raised By:</b>
<b>UR: Add Services to PSTN subscriber for EWSD Switches</b>	
<b>Current Flow:</b>	
<ul style="list-style-type: none"> <li>• CRM is the only northbound systems which sends Add Service requests to Webpack</li> <li>• The automatic provisioning is established through the existing OMCs which are NetManager nodes.</li> </ul>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

**Detailed Requirement:**

- A defined northbound interface will be the only initiator for Add Service provisioning requests towards the Provisioning system
- The target system will use the Provisioning system as single point of provisioning PSTN Add Service requests towards the EWSD switches
- The supported services are the ones listed in the Reference 13

*Note: Some requests are provisioned manually on the switches which are not connected to the OMCs; thus, they are excluded from this requirement*

<b>ID#: EMA-SRO-035</b>	<b>Raised By:</b>
<b>UR: Delete Services from PSTN subscriber for EWSD Switches</b>	
<b>Current Flow:</b> <ul style="list-style-type: none"> <li>• CRM is the only northbound systems which sends Delete Service requests to Webpack</li> <li>• The automatic provisioning is established through the existing OMCs which are NetManager nodes.</li> </ul>	
<b>Detailed Requirement:</b> <ul style="list-style-type: none"> <li>• A defined northbound interface will be the only initiator for Delete Service provisioning requests towards the Provisioning system</li> <li>• The target system will use the Provisioning system as single point of provisioning PSTN Delete Service requests towards the EWSD switches</li> <li>• The supported services are the ones listed in the Reference 13</li> </ul> <p><i>Note: Some requests are provisioned manually on the switches which are not connected to the OMCs; thus, they are excluded from this requirement</i></p>	

<b>ID#: EMA-SRO-036</b>	<b>Raised By:</b>
<b>UR: Delete PSTN subscriber for EWSD Switches</b>	
<b>Current Flow:</b> <ul style="list-style-type: none"> <li>• CRM is the only northbound systems which sends PSTN Deletion requests to Webpack</li> <li>• The automatic provisioning is established through the existing OMCs which are NetManager nodes.</li> </ul>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

**Detailed Requirement:**

- A defined northbound interface will be the only initiator for PSTN Deletion provisioning requests towards the Provisioning system
- The target system will use the Provisioning system as single point of provisioning PSTN Deletion requests towards the EWSD switches

*Note: Some requests are provisioned manually on the switches which are not connected to the OMCs; thus, they are excluded from this requirement*

<b>ID#: EMA-SRO-037</b>	<b>Raised By:</b>
<b>UR: Create PABX PSTN for EWSD Switches</b>	
<b>Current Flow:</b> <ul style="list-style-type: none"> <li>• CRM is the only northbound systems which sends PABX PSTN Creation requests to Webpack</li> <li>• The automatic provisioning is established through the existing OMCs which are NetManager nodes.</li> </ul>	
<b>Detailed Requirement:</b> <ul style="list-style-type: none"> <li>• A defined northbound interface will be the only initiator for PSTN PABX Creation provisioning requests towards the Provisioning system</li> <li>• The target system will use the Provisioning system as single point of provisioning PABX PSTN Creation requests towards the EWSD switches</li> </ul> <p><i>Note: Some requests are provisioned manually on the switches which are not connected to the OMCs; thus, they are excluded from this requirement</i></p>	

<b>ID#: EMA-SRO-038</b>	<b>Raised By:</b>
<b>UR: Add Line to PABX PSTN for EWSD Switches</b>	
<b>Current Flow:</b> <ul style="list-style-type: none"> <li>• CRM is the only northbound systems which sends PSTN PABX Add Line requests to Webpack</li> <li>• The automatic provisioning is established through the existing OMCs which are NetManager nodes.</li> </ul>	

Prepared (Subject resp)		No.		
Marwan Khoury		1029-FCP 132 1747		
Approved (Document resp)	Checked	Date	Rev	Reference
Ziad Hobeika		2018-07-10	D	

**Detailed Requirement:**

- A defined northbound interface will be the only initiator for PABX PSTN Add Line provisioning requests towards the Provisioning system
- The target system will use the Provisioning system as single point of provisioning PABX PSTN PABX Add Line requests towards the EWSD switches

*Note: Some requests are provisioned manually on the switches which are not connected to the OMCs; thus, they are excluded from this requirement*

<b>ID#: EMA-SRO-039</b>	<b>Raised By:</b>
<b>UR: Delete Line from PABX PSTN for EWSD Switches</b>	
<b>Current Flow:</b> <ul style="list-style-type: none"> <li>• CRM is the only northbound systems which sends PSTN PABX Delete Line requests to Webpack</li> <li>• The automatic provisioning is established through the existing OMCs which are NetManager nodes.</li> </ul>	
<b>Detailed Requirement:</b> <ul style="list-style-type: none"> <li>• A defined northbound interface will be the only initiator for PABX PSTN Delete Line provisioning requests towards the Provisioning system</li> <li>• The target system will use the Provisioning system as single point of provisioning PABX PSTN Delete Line requests towards the EWSD switches</li> </ul> <p><i>Note: Some requests are provisioned manually on the switches which are not connected to the OMCs; thus, they are excluded from this requirement</i></p>	

<b>ID#: EMA-SRO-040</b>	<b>Raised By:</b>
<b>UR: Delete PABX PSTN for EWSD Switches</b>	
<b>Current Flow:</b> <ul style="list-style-type: none"> <li>• CRM is the only northbound systems which sends PABX PSTN Deletion requests to Webpack</li> <li>• The automatic provisioning is established through the existing OMCs which are NetManager nodes.</li> </ul>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

**Detailed Requirement:**

- A defined northbound interface will be the only initiator for PABX PSTN Deletion provisioning requests towards the Provisioning system
- The target system will use the Provisioning system as single point of provisioning PABX PSTN Deletion requests towards the EWSD switches

*Note: Some requests are provisioned manually on the switches which are not connected to the OMCs; thus, they are excluded from this requirement*

<b>ID#: EMA-SRO-041</b>	<b>Raised By:</b>
<b>UR: Other PSTN Operations for EWSD Switches</b>	
<b>Current Flow:</b> <ul style="list-style-type: none"> <li>• CRM is the only northbound systems which sends PSTN “Others” requests to Webpack</li> <li>• The automatic provisioning is established through the existing OMCs which are NetManager nodes.</li> </ul>	
<b>Detailed Requirement:</b> <ul style="list-style-type: none"> <li>• PSTN “Others” operations are: Test Line, Test Device, Test Tone, Get Meter, Get Device Status, Get Line Status, Reset Keyword, Change Device, Activate Work Station, and Deactivate Work Station</li> <li>• A defined northbound interface will be the only initiator for PSTN “Others” provisioning requests towards the Provisioning system</li> <li>• The target system will use the Provisioning system as single point of provisioning PSTN “Others” requests towards the EWSD switches</li> </ul>	
<i>Note: Some requests are provisioned manually on the switches which are not connected to the OMCs; thus, they are excluded from this requirement</i>	

<b>ID#: EMA-SRO-042</b>	<b>Raised By:</b>
<b>UR: Create WCDMAPSTN for PSTN Switches</b>	
<b>Current Flow:</b> <ul style="list-style-type: none"> <li>• CRM is the only northbound systems which sends WCDMAPSTN Creation requests to Webpack</li> <li>• The automatic provisioning is established through the existing OMCs which are NetManager nodes.</li> </ul>	



Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

**Detailed Requirement:**

- A defined northbound interface will be the only initiator for provisioning WCDMAPSTN Creation requests towards the Provisioning system
- The target system will use the Provisioning system as single point of provisioning WCDMAPSTN Creation requests towards the EWSD switches

*Note: Some requests are provisioned manually on the switches which are not connected to the OMCs; thus, they are excluded from this requirement*

**ID#: EMA-SRO-043**
**Raised By:**
**UR: Delete WCDMAPSTN subscriber for EWSD Switches**
**Current Flow:**

- CRM is the only northbound systems which sends WCDMAPSTN Deletion requests to Webpack
- The automatic provisioning is established through the existing OMCs which are NetManager nodes.

**Detailed Requirement:**

- A defined northbound interface will be the only initiator for WCDMI Deletion provisioning requests towards the Provisioning system
- The target system will use the Provisioning system as single point of provisioning WCDMAPSTN Deletion requests towards the EWSD switches

*Note: Some requests are provisioned manually on the switches which are not connected to the OMCs; thus, they are excluded from this requirement*


**ID#: EMA-SRO-044**
**Raised By:**
**UR: GET WCDMAPSTN Device Status for EWSD Switches**
**Current Flow:**


- CRM is the only northbound systems which sends WCDMAPSTN GET requests to Webpack
- The automatic provisioning is established through the existing OMCs which are NetManager nodes.

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

**Detailed Requirement:**

- A defined northbound interface will be the only initiator for WCDMAPSTN GET provisioning requests towards the Provisioning system
- The target system will use the Provisioning system as single point of provisioning WCDMISDN GET requests towards the EWSD switches

 *Note: Some requests are provisioned manually on the switches which are not connected to the OMCs; thus, they are excluded from this requirement*


<b>ID#: EMA-SRO-049</b>	<b>Raised By:</b>
<b>UR: Rollback for EWSD Switches</b>	
<b>Current Flow:</b> <ul style="list-style-type: none"><li>• Rollback is secured either by Webpack or by CRM</li></ul>	
<b>Detailed Requirement:</b> <ul style="list-style-type: none"><li>• The provisioning system will secure rollback in case several southbound requests (sent by the provisioning system) were triggered by a single northbound request. For example, northbound system will send a request for Adding Profile X, the provisioning system will be responsible to add/activate multiple services for the subscriber by sending multiple MML requests. In case of failure while adding/activating any of the services, then the provisioning system will roll back the prior request(s) to their initial status.</li></ul>	
 <i>Note:</i>	

<b>ID#: EMA-SRO-050</b>	<b>Raised By:</b>
<b>UR: Provisioning of Huawei IMS domain</b>	
<b>Current Flow:</b> <ul style="list-style-type: none"><li>• For IMS services, the following 4 network elements are provisioned through the existing Huawei SPG: HSS, ATS, ENS, and ATS</li><li>• The interface used between the northbound system and the SPG is SOAP</li><li>• The northbound system is handling the provisioning orchestration among the 4 IMS NEs</li><li>• Use cases and the corresponding soap requests are listed in the Reference 14.</li></ul>	
<b>Detailed Requirement:</b> <ul style="list-style-type: none"><li>• A defined northbound interface will be the only initiator for provisioning IMS requests towards the Provisioning system</li></ul>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

- The target system will use the Provisioning system as a single point of provisioning towards the Huawei SPG
- The provisioning system will integrate directly with the existing Huawei SPG
- The provisioning system will not handle any delay/overload from the SPG node
- The provisioning system will not secure any load balancing/failover towards the SPG node(s). The provisioning system will send the SOAP requests to a defined IP address
- The provisioning system response will be completely dependent on the response received from the SPG
- Huawei SPG will secure the connectivity towards the Huawei IMS network. There is no direct connection between the provisioning system and any of the IMS nodes
- The Provisioning system will only support the use cases listed in the Reference 14
- The Provisioning system shall use the specified interface as described in Reference 14 to send requests towards the SPG.

 Note:

<b>ID#: EMA-SRO-051</b>	<b>Raised By:</b>
<b>UR: Create Subscriber for Huawei IMS</b>	
<b>Current Flow:</b> <ul style="list-style-type: none"> <li>• For IMS Creation, a northbound system is sending SOAP request(s) towards the Huawei IMS network via SPG</li> </ul>	
<b>Detailed Requirement:</b> <ul style="list-style-type: none"> <li>• A defined northbound interface will be the only initiator for provisioning IMS Creation requests towards the Provisioning system</li> <li>• The Provisioning system will send a Create SOAP request towards the SPG as described in Reference 14</li> </ul>	
 Note:	

<b>ID#: EMA-SRO-052</b>	<b>Raised By:</b>
<b>UR: Add Service for Huawei IMS</b>	
<b>Current Flow:</b> <ul style="list-style-type: none"> <li>• For IMS Add Service, a northbound system is sending SOAP request(s) towards the Huawei IMS network via SPG</li> </ul>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

**Detailed Requirement:**

- A defined northbound interface will be the only initiator for provisioning IMS Add Service requests towards the Provisioning system
- The Provisioning system will send an Add Service SOAP request towards the SPG as described in Reference 14
- The supported services are listed in the Reference 14

*Note:*

**ID#: EMA-SRO-053**
**Raised By:**
**UR: Delete Service for Huawei IMS**
**Current Flow:**

- For IMS Delete Service, a northbound system is sending SOAP request(s) towards the Huawei IMS network via SPG

**Detailed Requirement:**

- A defined northbound interface will be the only initiator for provisioning IMS Delete Service requests towards the Provisioning system
- The Provisioning system will send a Delete Service SOAP request towards the SPG as described in Reference 14
- The supported services are the ones listed in the Reference 14

*Note:*

**ID#: EMA-SRO-054**
**Raised By:**
**UR: Delete Subscriber for Huawei IMS**
**Current Flow:**

- For IMS Deletion, a northbound system is sending SOAP request(s) towards the Huawei IMS network via SPG


**Detailed Requirement:**


- A defined northbound interface will be the only initiator for provisioning IMS Deletion requests towards the Provisioning system

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

- The Provisioning system will send a Delete SOAP request towards the SPG as described in Reference 14

 Note:

<b>ID#: EMA-SRO-055</b>	<b>Raised By:</b>
<b>UR: Rollback for Huawei IMS</b>	
<b>Current Flow:</b> <ul style="list-style-type: none"><li>No Info provided</li></ul>	
<b>Detailed Requirement:</b> <ul style="list-style-type: none"><li>The provisioning system will secure rollback in case several southbound requests (sent by the provisioning system) were triggered by a single northbound request. For example, northbound system will send a request for Adding Profile X, the provisioning system will be responsible to add/activate multiple services for the subscriber by sending multiple Add SOAP requests. In case of failure while adding/activating any of the services, then the provisioning system will rollback the prior request(s) to their initial status.</li></ul>	
 Note:	

<b>ID#: EMA-SRO-056</b>	<b>Raised By:</b>
<b>UR: Huawei AAA</b>	
<b>Current Flow:</b> <ul style="list-style-type: none"><li>For DSL services, Huawei AAA is provisioned manually</li><li>Only Username and Password are provisioned for authentication purposes</li></ul>	
<b>Detailed Requirement:</b> <p>Provisioning system will provision the Huawei AAA based on the interface described in Reference 17</p>	
 Note: Only use cases related to the project's requirements will be implemented	

<b>ID#: EMA-SRO-057</b>	<b>Raised By:</b>
<b>UR: Huawei DSLAMS</b>	


Prepared (Subject resp)		No.		
Marwan Khoury		1029-FCP 132 1747		
Approved (Document resp)	Checked	Date	Rev	Reference
Ziad Hobeika		2018-07-10	D	


**Current Flow:**

- For DSL services, around 2K Huawei DSLAMs are provisioned through the existing Management System


**Detailed Requirement:**


- A defined northbound interface will be the only initiator for configuring the Huawei DSLAM ports through the Provisioning system
- The provisioning system will be integrated directly with the existing management system(s). There will be no direct integration between the provisioning system and the Huawei DSLAM nodes
- The provisioning system will not handle any delay/overload from the management system(s)
- The provisioning system will not secure any load balancing/failover towards the management system(s). The provisioning system will send the required requests to defined IP address(es)
- The provisioning system response will be completely dependent on the response received from the management system(s)

 *Note:*

<b>ID#: EMA-SRO-058</b>	<b>Raised By:</b>
<b>UR: PSTN Others Operations for AXE Switches</b>	
<b>Current Flow:</b> <ul style="list-style-type: none"> <li>CRM is the only northbound systems which sends ISDN “Others” requests to Webpack</li> <li>The automatic provisioning is established through the existing OMCs which are OSS-RC nodes.</li> </ul>	
<b>Detailed Requirement:</b> <ul style="list-style-type: none"> <li>PSTN “Others” operations are: Test Line, Test Device, Test Tone, Get Meter, Get Device Status, Get Line Status, Reset Keyword, ChangeDeviceSS, Activate and Deactivate CB</li> <li>A defined northbound interface will be the only initiator for PSTN “Others” provisioning requests towards the Provisioning system</li> <li>The target system will use the Provisioning system as single point of provisioning PSTN “Others” requests towards the Ericsson switches</li> </ul>	
<p> <i>Note: Some requests are provisioned manually on the switches which are not connected to the OMCs; thus, they are excluded from this requirement</i></p>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

<b>ID#: EMA-SRO-059</b>	<b>Raised By:</b>
<b>UR: ADSL Activate Port</b>	
<b>Current Flow:</b> <ul style="list-style-type: none"> <li>For ADSL port activation, operation team is using U2000 to generate the required commands towards the Huawei DSLAM</li> </ul>	
<b>Detailed Requirement:</b> <ul style="list-style-type: none"> <li>A defined northbound interface will be the only initiator for ADSL port activation requests towards the Provisioning system</li> <li>The Provisioning system will send ADSL port activation request towards the U2000 as described in Reference 18</li> </ul>	
 <i>Note:</i>	

<b>ID#: EMA-SRO-060</b>	<b>Raised By:</b>
<b>UR: ADSL Assign Profile</b>	
<b>Current Flow:</b> <ul style="list-style-type: none"> <li>For ADSL profile assignment, operation team is using U2000 to generate the required commands towards the Huawei DSLAM</li> </ul>	
<b>Detailed Requirement:</b> <ul style="list-style-type: none"> <li>A defined northbound interface will be the only initiator for ADSL assign profile requests towards the Provisioning system</li> <li>The Provisioning system will send ADSL assign profile request towards the U2000 as described in Reference 18</li> </ul>	
 <i>Note:</i>	


<b>ID#: EMA-SRO-061</b>	<b>Raised By:</b>
<b>UR: ADSL Deactivate Port</b>	
<b>Current Flow:</b> <ul style="list-style-type: none"> <li>For ADSL port deactivation, operation team is using U2000 to generate the required commands towards the Huawei DSLAM</li> </ul>	


Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

**Detailed Requirement:**

- A defined northbound interface will be the only initiator for ADSL port deactivation requests towards the Provisioning system
- The Provisioning system will send ADSL deactivate port request towards the U2000 as described in Reference 18

 Note:

<b>ID#: EMA-SRO-062</b>	<b>Raised By:</b>
<b>UR: SDSL Activate Port</b>	
<b>Current Flow:</b> <ul style="list-style-type: none"> <li>• For SDSL port activation, operation team is using U2000 to generate the required commands towards the Huawei DSLAM</li> </ul>	
<b>Detailed Requirement:</b> <ul style="list-style-type: none"> <li>• A defined northbound interface will be the only initiator for SDSL port activation requests towards the Provisioning system</li> <li>• The Provisioning system will send SDSL activate port request towards the U2000 as described in Reference 18</li> </ul>	
<p> Note:</p>	

<b>ID#: EMA-SRO-063</b>	<b>Raised By:</b>
<b>UR: SDSL Assign Profile</b>	
<b>Current Flow:</b> <ul style="list-style-type: none"> <li>• For SDSL profile assignment, operation team is using U2000 to generate the required commands towards the Huawei DSLAM</li> </ul>	
<b>Detailed Requirement:</b> <ul style="list-style-type: none"> <li>• A defined northbound interface will be the only initiator for SDSL assign profile requests towards the Provisioning system</li> <li>• The Provisioning system will send SDSL assign profile request towards the U2000 as described in Reference 18</li> </ul>	
<p> Note:</p>	



Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

--

<b>ID#: EMA-SRO-064</b>	<b>Raised By:</b>
<b>UR: SDSL Deactivate Port</b>	
<b>Current Flow:</b> <ul style="list-style-type: none"> <li>For SDSL port deactivation, operation team is using U2000 to generate the required commands towards the Huawei DSLAM</li> </ul>	
<b>Detailed Requirement:</b> <ul style="list-style-type: none"> <li>A defined northbound interface will be the only initiator for SDSL port deactivation requests towards the Provisioning system</li> <li>The Provisioning system will send SDSL deactivate port request towards the U2000 as described in Reference 18</li> </ul>	
<i>Note:</i>	

## 2.5.2 Non-Functional Requirements

<b>ID#: EMA-NFR-002</b>	<b>Raised by: -</b>
<b>UR: Provisioning System Fault Management</b>	
<b>Detailed Requirement:</b>	
Provisioning system shall send SNMP traps when provisioning interface is down	
<i>Note: Traps sent are subject to the out of the box capability of the provisioning system</i>	

<b>ID#: EMA-NFR-003</b>	<b>Raised by: -</b>
<b>UR: Provisioning System Log Tracking</b>	
<b>Detailed Requirement:</b>	
Provisioning system shall provide the capacity to track logs related to provisioning	
<i>Note: Logging action of the provisioning requests are subject to the out of the box capability of the provisioning system</i>	


<b>ID#: EMA-NFR-004</b>	<b>Raised by: -</b>
<b>UR: Provisioning System Restore</b>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

**Detailed Requirement:**

Provisioning system shall provide scripts that can be used to perform a full system restore

 Note:

<b>ID#: EMA-NFR-005</b>	<b>Raised by: -</b>
<b>UR: Provisioning System High Availability</b>	
<b>Detailed Requirement:</b>	
Provisioning system shall be in a high Availability cluster where multiple blades are handling the traffic.	
 Note:	

## 2.6 Architectural Block XAKTA


### 2.6.1 Number Management

<b>ID#: XAKTA-NBM-001</b>	<b>Raised By:</b>
<b>UR: Phone Number Types</b>	
<b>Current Flow:</b>	
Phone numbers have specific types: <ul style="list-style-type: none"> <li>• PSTN</li> <li>• ISDN</li> <li>• DIDX/DIDC/DIDM</li> <li>• GSHDSL</li> <li>• Leased Line</li> <li>• WCDMA</li> <li>• FTTB</li> </ul>	
<b>Detailed Requirement:</b>	
The target system shall provide the capability to define phone numbers type. The supported phone number types shall be: <ul style="list-style-type: none"> <li>• PSTN</li> <li>• PES</li> <li>• ISDN</li> </ul>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

- DIDX/DIDC/DIDM
- WCDMA
- CPT

 Note:

<b>ID#: XAKTA-NBM-002</b>	<b>Raised By:</b>
<b>UR: Phone Number Classification</b>	
<b>Current Flow:</b>  Directory numbers do not have any specific class (gold, platinum...).	
<b>Detailed Requirement:</b>  The target system shall provide the capability to classify phone numbers of types PSTN, WCDMA or PES. The supported phone number classes shall be: <ul style="list-style-type: none"> <li>• Diamond</li> <li>• Platinum</li> <li>• Gold</li> <li>• Silver</li> </ul>	
 Note:	

<b>ID#: XAKTA-NBM-003</b>	<b>Raised By:</b>
<b>UR: Phone Number Statuses</b>	
<b>Current Flow:</b>  The current Phone Number statuses are: <ul style="list-style-type: none"> <li>• Free</li> <li>• Reserved</li> <li>• Active</li> </ul>	
<b>Detailed Requirement:</b>  The target system shall have one of the following statuses for the Phone Number: <ul style="list-style-type: none"> <li>• <b>Free</b></li> </ul> A phone number with status free is linked to a device id and not reserved. <ul style="list-style-type: none"> <li>• <b>Reserved</b></li> <li>• <b>Active</b></li> </ul>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

A phone number with status active is currently belonging to a customer with active subscription.

- **X**


A phone number with status X is un-reserved and not linked to any device.


- **B**

A phone number with status B is set temporary by CRM during Change Phone Number operation: the new phone number status is set to 'B'. It prevents CRM from reserving it.

- **DSR**

A phone number with status DSR is set temporary by the switch/MDF team during the process of deporting it. When the deporting process ends, the status is set back to active again.

 *Note:*

<b>ID#: XAKTA-NBM-004</b>	<b>Raised By:</b>
<b>UR: Phone Number Status Changes</b>	
<b>Current Flow:</b>  N/A	
<b>Detailed Requirement:</b>  The following changes in the Phone Number Status shall be possible <ul style="list-style-type: none"> <li>• Free to (Reserved)</li> <li>• Reserved to (Free or Active)</li> <li>• Active to (Free)</li> <li>• X &lt;--&gt; Free</li> <li>• E &lt;--&gt; Free</li> <li>• Blocked &lt;--&gt; Free</li> </ul>	
 <i>Note:</i>	


<b>ID#: XAKTA-NBM-005</b>	<b>Raised By:</b>
<b>UR: Listing Free Phone Numbers</b>	
<b>Current Flow:</b>  Circee can be queried to list the free phone numbers.	


Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

**Detailed Requirement:**

Target system shall be able to provide the list of numbers with status 'Free' of a specific type and specific class on a given Switch or MGW.

 Note:

<b>ID#: XAKTA-NBM-006</b>	<b>Raised By:</b>
<b>UR: Adding Phone Numbers</b>	
<b>Current Flow:</b>  For fixed voice telephony numbers, on Circee level, the numbers are added with their device ID, related to a specific switch. The numbers should be aligned with the LAC of the related switch.	
<b>Detailed Requirement:</b>  Phone numbers shall be imported on the target system with their corresponding type along with a reference to the switch or MGW to which they belong. During the import procedure, an automatic classification is implemented based on the shared information from ST.	
 Note:	

<b>ID#: XAKTA-NBM-007</b>	<b>Raised By:</b>
<b>UR: Importing Phone Numbers and Devices</b>	
<b>Current Flow:</b>  N/A	
<b>Detailed Requirement:</b>  The system shall allow importing a tuple in form of (Phone Number, Device Id, Switch Name) where phone numbers are linked to switch device in the specified exchange.	
 Note:	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

<b>ID#: XAKTA-NBM-008</b>	<b>Raised By:</b>
<b>UR: Importing CPT Numbers</b>	
<b>Current Flow:</b>  N/A	
<b>Detailed Requirement:</b>  XAKTA shall be able to import the list of CPT numbers that are available to be used in ST network. These numbers are created with type CPT in inventory and their values are provided by ST. Provinces in which the CPT number is active are created in Inventory under this CPT number instance.	
<i>Note:</i>	

## 2.6.2 Inventory Management


<b>ID#: XAKTA-INM-001</b>	<b>Raised By:</b>
<b>UR: PSTN Equipment Management</b>	
<b>Current Flow:</b>  PSTN equipment are currently managed on Circee.	
<b>Detailed Requirement:</b>  The target system should have the possibility to store and manage the following PSTN physical resources: <ul style="list-style-type: none"> <li>• DP and DP Ports</li> <li>• Cabinet, Cabinet Primary Ports and Cabinet Secondary Ports</li> <li>• Vertical MDF and Vertical MDF Ports</li> <li>• Switch and Switch Device ID</li> <li>• WCDMA Transmitter</li> <li>• MIC</li> <li>• RDLU</li> <li>• Multiplexer</li> <li>• Type ONU switch</li> <li>• Primary cables</li> <li>• DDF</li> </ul>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

- OLT
- SPLITTER

PSTN Equipment Management shall only be available from the inventory system

 Note:


<b>ID#: XAKTA-INM-002</b>	<b>Raised By:</b>
<b>UR: PSTN Switch Device Type</b>	
<b>Current Flow:</b>  The following Device Types are supported: <ul style="list-style-type: none"> <li>• ISDN</li> <li>• DID: DIDX, DIDC, DIDM</li> <li>• WCDMA</li> <li>• PSTN</li> </ul>	
<b>Detailed Requirement:</b>  The target system should support the following PSTN Switch Device Types: <ul style="list-style-type: none"> <li>• ISDN</li> <li>• DID: DIDX, DIDC, DIDM</li> <li>• WCDMA</li> <li>• PSTN</li> </ul>	
 Note:	


<b>ID#: XAKTA-INM-003</b>	<b>Raised By:</b>
<b>UR: Manual PSTN Switches</b>	
<b>Current Flow:</b>  A PSTN with no link to an OMC is considered a manual Switch	
<b>Detailed Requirement:</b>  The target system shall consider all PSTN Switches with an empty value in the OMC attribute as a manual Switch. The manual status refers to the absence of an interface allowing the provisioning of those switches.	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

Changing a switch from manual to automatic and vice versa is done by updating the corresponding attribute in the inventory.


 *Note:*


<b>ID#: XAKTA-INM-004</b>	<b>Raised By:</b>
<b>UR: DSLAM Equipment Management</b>	
<b>Current Flow:</b>  N/A	
<b>Detailed Requirement:</b>  The target system should have the possibility to store and manage all the DSLAMs and DSLAM Ports shall the account number associated to it. DSLAM Equipment Management shall only be available from the inventory system	
 <i>Note: The account number is a unique identifier that points to the DSLAM and the DSLAM Port in ST network. It will be used for AAA</i>	

<b>ID#: XAKTA-INM-005</b>	<b>Raised By:</b>
<b>UR: MSAN Equipment Management</b>	
<b>Current Flow:</b>  MSANs are currently managed on Circee as a workaround where MSAN is represented as a Switch	
<b>Detailed Requirement:</b>  The target system should have the possibility to store and manage all the MSAN Type PSTN and MSAN Type Combo which will represent the PES devices. The MSAN Type Combo Ports shall have the account number associated to it MSAN Equipment Management shall only be available from the inventory system.	
 <i>Note:</i>	



Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

<b>ID#: XAKTA-INM-006</b>	<b>Raised By:</b>
<b>UR: FTTB Equipment Management</b>	
<b>Current Flow:</b>  FTTB equipment's are currently provisioned on Circee as a workaround where OLTs are represented as MDFs, Splitters are represented as cabinets, ONOs are represented as DPs.	
<b>Detailed Requirement:</b>  The target system should have the possibility to store and manage the following FTTB physical resources: <ul style="list-style-type: none"> <li>• OLT</li> <li>• Splitter</li> <li>• ONU/ONO</li> </ul> FTTB Equipment Management shall only be available from the inventory system	
 <i>Note:</i>	

<b>ID#: XAKTA-INM-007</b>	<b>Raised By:</b>
<b>UR: Storing Unavailable MDF/Cabinet/DP Ports Results</b>	
<b>Current Flow:</b>  N/A	
<b>Detailed Requirement:</b>  The target system shall store the requests when an unavailable MDF/Cabinet primary/secondary or DP port result was returned. The stored data shall contain the below information <ul style="list-style-type: none"> <li>• Switch or MGW</li> <li>• Vertical MDF</li> <li>• Cabinet Primary/Secondary</li> <li>• DP</li> </ul> Storing Unavailable ports results will only be applied when the request for 'Retrieving Free DP Ports' is received and no ports were available on a given DP.	
 <i>Note:</i>	

Prepared (Subject resp)		No.		
Marwan Khoury		1029-FCP 132 1747		
Approved (Document resp)	Checked	Date	Rev	Reference
Ziad Hobeika		2018-07-10	D	

<b>ID#: XAKTA-INM-008</b>	<b>Raised By:</b>
<b>UR: Network Planning</b>	
<b>Current Flow:</b>  N/A	
<b>Detailed Requirement:</b>  The target system shall provide the possibility of network planning. In this context, planning is defined as creating equipment in XAKTA with status planned. This equipment should not be visible to external nodes requests neither for reservation or for status checks.	
<i>Note:</i>	


<b>ID#: XAKTA-INM-009</b>	<b>Raised By:</b>
<b>UR: Technical Line Description</b>	
<b>Current Flow:</b>  CSR uses CRM to request a description of a given phone number from Circee. Circee will return the fields related to the Switch, MDF, Cabinet and DP.	
<b>Detailed Requirement:</b>  The target system should provide the technical line description given a phone number or a path ID. The description of the Line shall depend on its type.  If Line Type is PSTN/ISDN, the below parameters are retrieved: <ul style="list-style-type: none"> <li>Vertical MDF and MDF Port</li> <li>Cabinet, Cabinet Primary Port and Cabinet Secondary Port</li> <li>DP and DP Port</li> <li>Switch, Switch Device ID</li> <li>Switch OMC (If available)</li> </ul> If Line Type is PES, the below parameters are retrieved: <ul style="list-style-type: none"> <li>Vertical MDF and MDF Port</li> <li>Cabinet, Cabinet Primary Port and Cabinet Secondary Port</li> <li>DP and DP Port</li> <li>MSAN EID and MSAN TID</li> <li>MSAN Type (PSTN or Combo)</li> </ul>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

If ADSL service is available and Line Type is PSTN, the below additional parameters are retrieved:

- DSLAM and DSLAM Port
- DSLAM OMC (If available)

 *Note:*

<b>ID#: XAKTA-INM-010</b>	<b>Raised By:</b>
<b>UR: Switch Telephony Line Reservation Possibility Threshold</b>	
<b>Current Flow:</b>	
<b>Detailed Requirement:</b>	
<p>Target system shall implement a threshold related to the available free phone numbers in a given switch. If in a certain location, multiple switches are present, the free phone numbers value is calculated by summing up the ones belonging to each single switch.</p> <p>If the value is less than the threshold defined, line reservation possibility will be rejected by Inventory.</p>	
 <i>Note:</i>	

<b>ID#: XAKTA-INM-011</b>	<b>Raised By:</b>
<b>UR: Return Free PSTN Telephony Line</b>	
<b>Current Flow:</b>	
<p>CSR uses CRM to request from Circee the availability of port number (PN) given a phone number. The result is either:</p> <ol style="list-style-type: none"> <li>1. No free port is available on the DP where the given phone number resides.</li> <li>2. Free ports are available on the DP where the given phone number resides. In this case, the following information are returned: <ul style="list-style-type: none"> <li>• A free DP port on the DP</li> <li>• The Cabinet and a free primary and secondary port on the Cabinet</li> <li>• The Vertical MDF and the MDF port connected to the Cabinet Primary port</li> <li>• The Vertical MDF and the MDF port connected port connected to the Cabinet reserved primary port for the phone number</li> <li>• The Switch, the switch device, a free phone number associated to the switch's device and its related OMC.</li> </ul> </li> </ol>	

Prepared (Subject resp)		No.		
Marwan Khoury		1029-FCP 132 1747		
Approved (Document resp)	Checked	Date	Rev	Reference
Ziad Hobeika		2018-07-10	D	

### Detailed Requirement:

The target system shall return the following specific PSTN parameters, based on a given phone number, if the requested free Line Type is PSTN/PES and a PSTN Line is available

- Vertical MDF and MDF Port (connected to the Free Cabinet Primary Port)
- Cabinet, a Free Cabinet Primary Port and Cabinet Secondary Port (connected to the Free DP Port)
- DP and a Free DP Port
- Switch and a Free Switch PSTN Device ID
- Switch OMC (If available)

PSTN Line availability is defined by having free ports on the DP, free PSTN Device ID on the Switch and the Switch PSTN Ports threshold has not been reached

This query can only be called from external systems through an API and shall not be available for the user

 *Note:*

<b>ID#: XAKTA-INM-012</b>	<b>Raised By:</b>
<b>UR: Return Free PES Telephony Line</b>	

### Current Flow:

CSR uses CRM to request from Circee the availability of port number (PN) given a phone number. The result is either:

1. No free port is available on the DP where the given phone number resides.
2. Free ports are available on the DP where the given phone number resides. In this case, the following information are returned:
  - A free DP port on the DP
  - The Cabinet and a free primary and secondary port on the Cabinet
  - The Vertical MDF and the MDF port connected to the Cabinet Primary port
  - The Vertical MDF and the MDF port connected port connected to the Cabinet reserved primary port for the phone number
  - The Switch, the switch device, a free phone number associated to the switch's device and its related OMC.

### Detailed Requirement:

The target system shall return the following specific PES parameters, based on a given phone number, if the requested free Line Type is PSTN/PES and a PES Line is available

- Vertical MDF and MDF Port (connected to the Free Cabinet Primary Port)
- Cabinet, a Free Cabinet Primary Port and Cabinet Secondary Port (connected to the Free DP Port)
- DP and a Free DP Port

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

- MSAN EID and a Free MSAN TID
- MSAN Type (PSTN or Combo)

PES Line availability is defined by having free ports on the DP, free TID on the MGW and the MGW Ports threshold has not been reached

This query can only be called from external systems through an API and shall not be available for the user

 Note:

<b>ID#: XAKTA-INM-013</b>	<b>Raised By:</b>
<b>UR: Return Free ISDN Telephony Line</b>	

#### Current Flow:

CSR uses CRM to request from Circee the availability of port number (PN) given a phone number. The result is either:

1. No free port is available on the DP where the given phone number resides.
2. Free ports are available on the DP where the given phone number resides. In this case, the following information are returned:
  - A free DP port on the DP
  - The Cabinet and a free primary and secondary port on the Cabinet
  - The Vertical MDF and the MDF port connected to the Cabinet Primary port
  - The Vertical MDF and the MDF port connected port connected to the Cabinet reserved primary port for the phone number
  - The Switch, the switch device, a free phone number associated to the switch's device and its related OMC.

#### Detailed Requirement:

The target system shall return the following specific ISDN parameters, based on a given phone number, if the requested free Line Type is ISDN and a ISDN Line is available


- Vertical MDF and MDF Port (connected to the Free Cabinet Primary Port)
- Cabinet, a Free Cabinet Primary Port and Cabinet Secondary Port (connected to the Free DP Port)
- DP and a Free DP Port
- Switch and a Free Switch ISDN Device ID
- Switch OMC (If available)

ISDN Line availability is defined by having free ports on the DP, free ISDN Device ID on the Switch and the Switch ISDN Ports threshold has not been reached

This query can only be called from external systems through an API and shall not be available for the user.

Prepared (Subject resp)		No.		
Marwan Khoury		1029-FCP 132 1747		
Approved (Document resp)	Checked	Date	Rev	Reference
Ziad Hobeika		2018-07-10	D	

 Note:

<b>ID#: XAKTA-INM-014</b>	<b>Raised By:</b>
<b>UR: Return Free WCDMA Telephony Line</b>	
<p><b>Current Flow:</b></p> <p>CSR uses CRM to request from Circee the availability of port number (PN) given a phone number. The result is either:</p> <ol style="list-style-type: none"> <li>1. No free port is available on the DP where the given phone number resides.</li> <li>2. Free ports are available on the DP where the given phone number resides. In this case, the following information are returned: <ul style="list-style-type: none"> <li>• A free DP port on the DP</li> <li>• The Cabinet and a free primary and secondary port on the Cabinet</li> <li>• The Vertical MDF and the MDF port connected to the Cabinet Primary port</li> <li>• The Vertical MDF and the MDF port connected port connected to the Cabinet reserved primary port for the phone number</li> <li>• The Switch, the switch device, a free phone number associated to the switch's device and its related OMC.</li> </ul> </li> </ol>	
<p><b>Detailed Requirement:</b></p> <p>The target system shall return the following specific WCDMA parameters, based on a given phone number, if the requested free Line Type is WCDMA and a WCDMA Line is available</p> <ul style="list-style-type: none"> <li>• Transmitter and Free Transmitter Port</li> <li>• Receiver and Free Receiver Port</li> <li>• Switch and a Free Switch WCDMA Device ID</li> <li>• Switch OMC (If available)</li> </ul> <p>WCDMA Line availability is defined by having free ports on the receiver, free WCDMA Device ID on the Switch and the Switch WCDMA Ports threshold has not been reached</p> <p>This query can only be called from external systems through an API and shall not be available for the user.</p>	
<p> Note:</p>	

<b>ID#: XAKTA-INM-015</b>	<b>Raised By:</b>
<b>UR: Return Free DID Telephony Line</b>	
<p><b>Current Flow:</b></p> <p>CSR uses CRM to request from Circee the availability of port number (PN) given a phone number. The result is either:</p>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

1. No free port is available on the DP where the given phone number resides.
2. Free ports are available on the DP where the given phone number resides. In this case, the following information are returned:
  - A free DP port on the DP
  - The Cabinet and a free primary and secondary port on the Cabinet
  - The Vertical MDF and the MDF port connected to the Cabinet Primary port
  - The Vertical MDF and the MDF port connected port connected to the Cabinet reserved primary port for the phone number
  - The Switch, the switch device, a free phone number associated to the switch's device and its related OMC.


**Detailed Requirement:**

The target system shall return the following specific DID parameters, based on a given phone number, if the requested free Line Type is DID and a DID Line is available

- Vertical MDF and MDF Port (connected to the Free Cabinet Primary Port)
- Cabinet, a Free Cabinet Primary Port and Cabinet Secondary Port (connected to the Free DP Port)
- DP and a Free DP Port
- Switch and a Free Switch DID Device ID
- Switch OMC (If available)

DID Line availability is defined by having free ports on the DP and free DID Device IDs on the Switch.

This query can only be called from external systems through an API and shall not be available for the user.


 *Note:*


<b>ID#: XAKTA-INM-016</b>	<b>Raised By:</b>
<b>UR: Return Free Leased Line</b>	
<b>Current Flow:</b>  The CSR can check the technical possibility for a subscription through CRM system based on two nearby phone number, if the technical possibility is available the customer can get a reservation possibility and continue in subscription operation.	
<b>Detailed Requirement:</b>  The target system should provide the ability to be queried for a Free Leased Line given two phone numbers. If a Leased Line reservation is possible (i.e. free ports are available), the following information shall be returned on each location: <ul style="list-style-type: none"> <li>• MIC(s)</li> </ul>	


Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

- Vertical MDF and MDF Port (connected to the Free Cabinet Primary Port)
- Cabinet, a Free Cabinet Primary Port and Cabinet Secondary Port (connected to the Free DP Port)
- DP and a Free DP Port

This query can only be called from external systems through an API and shall not be available for the user

 Note:

<b>ID#: XAKTA-INM-017</b>	<b>Raised By:</b>
<b>UR: Listing Free DP Ports</b>	
<b>Current Flow:</b>  Circee can be queried to list the free DP Ports.	
<b>Detailed Requirement:</b>  Target system shall be able to provide the list of free DP Ports on a given DP.	
 Note:	

<b>ID#: XAKTA-INM-018</b>	<b>Raised By:</b>
<b>UR: Listing Free WCDMA Receiver Ports</b>	
<b>Current Flow:</b>  N/A	
<b>Detailed Requirement:</b>  Target system shall be able to provide the list of free receiver ports on a given WCDMA receiver.	
 Note:	

<b>ID#: XAKTA-INM-019</b>	<b>Raised By:</b>
<b>UR: Return Free xDSL Line</b>	
<b>Current Flow:</b>	



Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

The CSR can check the technical possibility for a subscription through CRM system , if the technical possibility is available the customer can get a reservation possibility and continue in subscription operation.

#### Detailed Requirement:

The target system should provide the ability to be queried for a Free xDSL Line given a phone number and an indicator on whether an existing Telephony Line should be used or a new one.


This query can only be called from external systems through an API and shall not be available for the user.

 Note:

<b>ID#: XAKTA-INM-020</b>	<b>Raised By: -</b>
<b>UR: Return Free ADSL Line using Existing Telephony Line</b>	
<b>Current Flow:</b>	
<b>Detailed Requirement:</b>  Target system shall support returning free ADSL line parameters. The requesting system provides CSO location, sets requested xDSL type to ADSL.  If the corresponding Line Type is PSTN, ISDN or PES with MSAN Type PSTN and a ADSL Line is available (free ports available on a DSLAM belonging to the same CSO), the following information are retrieved: <ul style="list-style-type: none"> <li>• Vertical MDF and MDF Port</li> <li>• Cabinet, Cabinet Primary Port and Cabinet Secondary Port</li> <li>• DP and DP Port</li> <li>• A Free DSLAM and a Free DSLAM Port along with the account number associated to the Free DSLAM Port</li> <li>• DSLAM OMC (If available)</li> </ul> If the corresponding Line Type is PES with MSAN Type Combo, the following information are retrieved: <ul style="list-style-type: none"> <li>• Vertical MDF and MDF Port</li> <li>• Cabinet, Cabinet Primary Port and Cabinet Secondary Port</li> <li>• DP and DP Port</li> <li>• MSAN EID and MSAN TID along with the account number associated to the MSAN TID</li> </ul> This query can only be called from external systems through an API and shall not be available for the user	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

 *Note:*

<b>ID#: XAKTA-INM-021</b>	<b>Raised By: -</b>
<b>UR: Return Free GSHDSL Line</b>	
<b>Current Flow:</b>	
<b>Detailed Requirement:</b>  Target system supports returning free GSHDSL line parameters. The requesting system provides CSO location, sets requested xDSL type to GSHDSL.  The returned information is as follows: <ul style="list-style-type: none"> <li>Vertical MDF and MDF Port (connected to the Free Cabinet Primary Port)</li> <li>Cabinet, a Free Cabinet Primary Port and Cabinet Secondary Port (connected to the Free DP Port)</li> <li>DP and a Free DP Port that is not on multiplexer.</li> <li>A Free DSLAM and a Free DSLAM Port along with the account number associated to the Free DSLAM Port</li> <li>DSLAM OMC (If available)</li> </ul> This query can only be called from external systems through an API and shall not be available for the user	
 <i>Note:</i>	

<b>ID#: XAKTA-INM-022</b>	<b>Raised By:</b>
<b>UR: Create Line Path</b>	
<b>Current Flow:</b>  N/A	
<b>Detailed Requirement:</b> The target system shall allow creation of Line Path. The Line Path object shall comprise the following properties: <ul style="list-style-type: none"> <li>Parameters depending on the line type: LL, FTTB, GSHDSL, Telephony.</li> <li>A resource id (eg. Phone number or username, etc...)</li> </ul>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference


- Vertical MDF and MDF Port
- Cabinet, Cabinet Primary Port and Cabinet Secondary
- DP
- DP Port
- Device ID (optional)
- MIC(s) (optional in case of deported number)

For FTTB, additional nodes are:

- OLT
- SPLITTER
- ONU

For Leased Line, additional nodes are :

- MIC
- DDF

 Note:

**ID#: XAKTA-INM-023**

**Raised By:**

**UR: Line Path Statuses**


**Current Flow:**

N/A

**Detailed Requirement:**

The target system shall have one of the following statuses for the Line Path:

- Planned for Activation
- Planned for Removal
- Active

 Note:

**ID#: XAKTA-INM-024**

**Raised By:**

**UR: Line Path Status Changes**

**Current Flow:**

N/A


**Detailed Requirement:**


The following changes in the Line Path Status shall be possible

- Planned for Activation to (Active)
- Active to (Planned for Removal)

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

 *Note:*

<b>ID#: XAKTA-INM-025</b>	<b>Raised By:</b>
<b>UR: Delete Line Path</b>	
<b>Current Flow:</b>  N/A	
<b>Detailed Requirement:</b>  The target system shall offer the possibility to delete a line path. A line path can only be deleted if it is in a Planned for Removal status.	
 <i>Note:</i>	

<b>ID#: XAKTA-INM-026</b>	<b>Raised By:</b>
<b>UR: Port Statuses</b>	
<b>Current Flow:</b>  Current port status available in Circee are as follows: <ul style="list-style-type: none"> <li>• Free</li> <li>• Reserved</li> <li>• Active</li> <li>• Faulty</li> <li>• NOT-CONNECTED</li> </ul>	
<b>Detailed Requirement:</b>  The target system shall have one of the following statuses for the Ports on the different resources: <ul style="list-style-type: none"> <li>• Free</li> <li>• Reserved</li> <li>• Active</li> <li>• Faulty</li> <li>• NOT-CONNECTED</li> <li>• Dead</li> </ul>	
 <i>Note:</i>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

<b>ID#: XAKTA-INM-027</b>	<b>Raised By:</b>
<b>UR: Port Status Changes</b>	
<b>Current Flow:</b>	
<b>Detailed Requirement:</b>	
<p>The following changes in the Port Status shall be possible</p> <ul style="list-style-type: none"><li>• Free to (Reserved or Faulty)</li><li>• Reserved to (Free or Active)</li><li>• Active to (Free or Faulty)</li><li>• Faulty to (Free)</li><li>• NC &lt;-&gt; Free</li></ul>	
<i>Note:</i>	

<b>ID#: XAKTA-INM-028</b>	<b>Raised By:</b>
<b>UR: Reserve Line</b>	
<b>Current Flow:</b>	
CSR uses CRM to reserve a new PSTN line on Circee.	
<b>Detailed Requirement:</b>	
<p>Target system shall allow reservation of the Line consisting of:</p> <ul style="list-style-type: none"><li>• The corresponding parameters depending on the Line and the Line Type</li><li>• Vertical MDF and MDF Port (connected to the Free Cabinet Primary Port)</li><li>• Cabinet, a Free Cabinet Primary Port and Cabinet Secondary Port (connected to the Free DP Port)</li><li>• DP and Free DP Port</li></ul> <p>Reserving the line shall change the port statuses on each resource from free to reserved and create a line path in planned status.</p> <p>The Id of the Line Path that is created shall be returned to the external system in response.</p>	
<i>Note:</i>	


<b>ID#: XAKTA-INM-029</b>	<b>Raised By:</b>
<b>UR: Activate Line</b>	
<b>Current Flow:</b>	
Activating a new PSTN line on Circee is possible through CRM or the Circee GUI	


Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference


**Detailed Requirement:**

Target system shall allow activation of a Line path.

Activating the line shall change the port statuses on each resource from reserved to active and change the line path status from planned to active.

 Note:

<b>ID#: XAKTA-INM-030</b>	<b>Raised By:</b>
<b>UR: Cancel Line Reservation</b>	
<b>Current Flow:</b>  N/A	
<b>Detailed Requirement:</b>  Target system shall allow canceling a Line reservation. This action is only available if a line path is available in planned status. Canceling the line reservation shall change the port statuses on each resource from reserved to free and delete the line path	
 Note:	

<b>ID#: XAKTA-INM-031</b>	<b>Raised By:</b>
<b>UR: List Available Switch/MGW Services</b>	
<b>Current Flow:</b>  CSR uses CRM to request from Circee the available services on a given switch. The result of this query is a list of available services on the switch.	
<b>Detailed Requirement:</b>  The target system should provide the ability to be queried for services that are available on a given Switch/MGW.	
 Note:	

<b>ID#: XAKTA-INM-032</b>	<b>Raised By:</b>
<b>UR: Return Line Path Status</b>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference


**Current Flow:**

N/A

**Detailed Requirement:**

XAKTA shall be able to save the operational status of the following nodes: Switch, MDF, DSLAM, Primary cable, Cabinet primary port, Cabinet secondary port.  
For Leased line, additional nodes will be returned: MIC, DDF.  
For FTTB, additional nodes will be returned: OLT ,SPLITTER,ONU.  
For WCDMA , Transmitter and Receiver will be returned.  
The operational status could be either Faulty or OK.  
The operational status is updated manually by the technical teams.  
When returning the Line Path status, XAKTA shall include the status of the above nodes along with the response.

 Note:


<b>ID#: XAKTA-INM-033</b>	<b>Raised By:</b>
<b>UR: Change Reservation and port status</b>	
<b>Current Flow:</b>	
N/A	
<b>Detailed Requirement:</b>	
Target system shall allow one person in every province to change reservation or port status in PSTN: DP/Cabinet/MDF WCDMA: Transmitter/Receiver FTTB: OLT/Splitter/ONU from inventory and the system will create log file for the actions performed.	
 Note:	


<b>ID#: XAKTA-INM-034</b>	<b>Raised By:</b>
<b>UR: Deport numbers actions</b>	
<b>Current Flow:</b>	
N/A	
<b>Detailed Requirement:</b>	
As part of the deport number process, XAKTA shall support the following activities: a. edit old line path specifically: MDF to Cabinet to DP connection	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

- b. apply the following changes to the line path:
- attach old MDF to MIC.
  - Create MIC to MIC connections
  - Attach MIC to MDF connection
  - Append MDF to new Primary cabinet port
  - Append New secondary cabinet port to new DP port

 Note:

<b>ID#: XAKTA-INM-035</b>	<b>Raised By:</b>
<b>UR: Attach CPT number to PSTN number</b>	
<b>Current Flow:</b>  N/A	
<b>Detailed Requirement:</b>  System shall provide an option to link the number type CPT with the number type PSTN. This functionality is exposed as a web-service for external system.	
 Note:	

<b>ID#: XAKTA-INM-036</b>	<b>Raised By:</b>
<b>UR: DP and Cabinet Address information</b>	
<b>Current Flow:</b>	
<b>Detailed Requirement:</b>  System shall provide the capability assign geographical location information for Cabinets and DPs. The location is merely a text that is provided by ST.	
 Note:	


<b>ID#: XAKTA-INM-037</b>	<b>Raised By:</b>
<b>UR: DP and Cabinets Connectivity</b>	
<b>Current Flow:</b>	



Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference


**Detailed Requirement:**

System shall provide the capability to connect DP to one or more cabinets and connect Cabinet to one or more cable from MDF.

 Note:


**ID#: XAKTA-INM-038**
**Raised By:**
**UR: Changing DP to Cabinet connection**
**Current Flow:**
**Detailed Requirement:**

System shall provide the possibility to modify the connectivity of a DP from one cabinet to another or in the same cabinet

 Note:

**ID#: XAKTA-INM-039**
**Raised By:**
**UR: Network node expansion**
**Current Flow:**
**Detailed Requirement:**

System shall provide the possibility to expand a network node capacity (Switch, MDF, Cabinet, DP, WCDMA Transmitter, WCDMA Receiver, FTTB OLT, FTTB Splitter, FTTB ONU, Leased line MIC/DDF) by adding devices or ports accordingly.


 Note:


**ID#: XAKTA-INM-040**
**Raised By:**
**UR: Change cable connectivity in MDF**
**Current Flow:**
**Detailed Requirement:**

System shall provide the possibility to change the connection of a cable from one vertical MDF to another.

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

 Note:

<b>ID#: XAKTA-INM-041</b>	<b>Raised By:</b>
<b>UR: Attaching or Detaching multiplexer</b>	
<b>Current Flow:</b>	
<b>Detailed Requirement:</b>	
System shall provide possibility to attach a DP port or cabinet primary port to multiplexer or to detach multiplexer from DP port or cabinet primary port. The DP port status shall be set to Free after the above actions.	
 Note:	


<b>ID#: XAKTA-INM-042</b>	<b>Raised By:</b>
<b>UR: Removing Ports with Status Dead</b>	
<b>Current Flow:</b>	
<b>Detailed Requirement:</b>	
System shall provide the possibility to search for MDF/Cabinet/DP ports with status “Dead” and allows bulk removal of these ports from inventory.	
 Note:	


<b>ID#: XAKTA-INM-043</b>	<b>Raised By:</b>
<b>UR: Xakta local operations</b>	
<b>Current Flow:</b>	
<b>Detailed Requirement:</b>	
In the target architecture, Xakta will provide the below functionalities:	
<ul style="list-style-type: none"> <li>• Get Technical Line Reservation</li> <li>• Get Switch OMC</li> <li>• Get Switch Services</li> <li>• Line Reservation</li> <li>• Line Activation</li> <li>• Cancel Line Reservation</li> </ul>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

- Line Blocking
- Number Change (keep same reservation)
- Change Reservation
- Line Moving within the same exchange (Reservation, Activation, Cancellation)
- Leased Line reservation between sites: User shall input the begin and endpoint (Nearby numbers), then system shall suggest list of all applicable paths between these two sites based on MICS/DDFs previously created. After path selection, the path will be displayed, and then user can reserve the selected path.


 Note:


<b>ID#: XAKTA-INM-044</b>	<b>Raised By:</b>
<b>UR: DP and Cabinet renaming</b>	
<b>Current Flow:</b>	
<b>Detailed Requirement:</b>	
System shall provide the capability to rename cabinet and its related DPs	
 Note:	


<b>ID#: XAKTA-INM-045</b>	<b>Raised By:</b>
<b>UR: DSLAM ports reservation model</b>	
<b>Current Flow:</b>	
<b>Detailed Requirement:</b>	
Target system shall handle DSLAM ports reservation as per below model: <ol style="list-style-type: none"> <li>1. DSLAM ports shall all be put together in one pool along with an identifier of which ISP owns them: Tarasul, GM (General Manager), ISPA, ISPB, etc...</li> <li>2. Another pool of DSLAM ports (Spare Pool), that are not assigned to any ISP should be available.</li> <li>3. External system (such as CRM/BIL) should be able to request a free ADSL port from the spare ports and provide its assignment to a particular ISP <ol style="list-style-type: none"> <li>a. XAKTA provides a spare port and updates its assignment to the ISP provided by external system.</li> </ol> </li> </ol>	
 Note:	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

### 2.6.3 Contact Center

<b>ID#: XAKTA-CCR-002</b>	<b>Raised By:</b>
<b>UR: Resources Search</b>	
<b>Current Flow:</b>  The detailed information on network resources is not classified by province or region.	
<b>Detailed Requirement:</b>  The target system should have the possibility of searching for the information of a specific network resource by province or region.	
 <i>Note:</i>	

<b>ID#: XAKTA-CCR-003</b>	<b>Raised By:</b>
<b>UR: CPT Search</b>	
<b>Current Flow:</b>  	
<b>Detailed Requirement:</b>  System shall provide the capability to search for CPT numbers, the system shall display the phone numbers linked to CPT number.	
 <i>Note:</i>	

<b>ID#: XAKTA-CCR-004</b>	<b>Raised By:</b>
<b>UR: DP port change history</b>	
<b>Current Flow:</b>  	
<b>Detailed Requirement:</b>  System shall provide the capability of saving DP and Cabinet port status history changes.	
 <i>Note:</i>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

<b>ID#: XAKTA-CCR-005</b>	<b>Raised By:</b>
<b>UR: FTTB port search</b>	
<b>Current Flow:</b>	
<b>Detailed Requirement:</b>	
System shall provide the capability of searching for free FTTB ports.	
<i>Note:</i>	

## 2.6.4 Identity Management

<b>ID#: XAKTA-IDM-001</b>	<b>Raised By: -</b>
<b>UR: Inventory User Access Rights</b>	
<b>Current Flow:</b>	
Circee support different user profile roles with different privileges on Network Resource Type (MDF, Cabinet, DP, Network Element, Card, Port etc.) as well as write privileges per province or region.	
<b>Detailed Requirement:</b>	
Target system shall support different user profile roles with different privileges on Network Resource Type (MDF, Cabinet, DP, Network Element, Card, Port etc.).	
<i>Note: The number of concurrent users shall not exceed 240.</i>	

<b>ID#: XAKTA-IDM-002</b>	<b>Raised By: -</b>
<b>UR: Users and Groups in Xakta</b>	
<b>Current Flow:</b>	
<b>Detailed Requirement:</b>	
In the target architecture, Xakta shall provide the capability to define user access structure as follows:	
1- Users	
2- Groups	
A user by default inherits the permissions from the groups to which it belongs.	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference


The defined permissions are:

- 1- Read Only
- 2- Read/Write
- 3- None

Permissions are set on group level and each group is authorized to access specific objects (Switch, MDF, Cabinet, DP etc...)

 Note:

## 2.6.5 Big Data Analytics and Business Intelligence

<b>ID#: XAKTA-BDA-001</b>	<b>Raised By: -</b>
<b>UR: MDF/MDC/MIC/WCD Configuration Report</b>	
<b>Current Flow:</b>  Circee Provides a report for Check MDF/MDC/MIC/WCD Configuration. This report provides information about a specific MDF (total number of ports - dead ports per vertical)	
<b>Detail Requirement: -</b>  System shall provide the possibility to generate a report about a specific MDF (total number of ports - dead ports per vertical)  Report will be provided with the below Fields <ol style="list-style-type: none"> <li>a- MDF Name</li> <li>b- Vertical</li> <li>c- Minimum Port</li> <li>d- Maximum Port</li> <li>e- Total number of Ports</li> <li>f- Number of Dead Ports</li> </ol>	
 Note:	

<b>ID#: XAKTA-BDA-002</b>	<b>Raised By: -</b>
<b>UR: Cabinet Configuration report</b>	
<b>Current Flow:</b>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

Circee Provides a report for Check Cabinet Configuration. This report provides information about a specific Cabinet (total number of ports - dead ports per primary and secondary sides)


**Detail Requirement: -**

System shall provide the possibility to generate a report about a specific Cabinet (total number of ports - dead ports per primary and secondary sides)


Report will be provided with the below Fields

- a. Cabinet Name
- b. Cabinet ID
- c. Box
- d. Minimum Port
- e. Maximum Port
- f. Total number of Ports
- g. Number of Dead Ports

 *Note:*

<b>ID#: XAKTA-BDA-003</b>	<b>Raised By: -</b>
<b>UR: DP Configuration report</b>	
<p><b>Current Flow:</b></p> <p>Circee Provides a report for Check DP Configuration. This report provides information about a specific DP (total number of ports - dead ports per DP)</p>	
<p><b>Detail Requirement: -</b></p> <p>System shall provide the possibility to generate a report about a specific DP (total number of ports - dead ports per DP)</p> <p>Report will be provided with the below Fields</p> <ol style="list-style-type: none"> <li>a- DP Name</li> <li>b- Cabinet ID</li> <li>c- Minimum Port</li> <li>d- Maximum Port</li> <li>e- Total number of Ports</li> <li>f- Number of Dead Ports</li> </ol>	
<p> <i>Note:</i></p>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

<b>ID#: XAKTA-BDA-004</b>	<b>Raised By: -</b>
<b>UR: Cabinet to MDF connection report</b>	
<b>Current Flow:</b>  Circee Provides a report for Check Nodes Characteristics. This report provides information about how cabinet's primary ports are distributed over a MDF (verticals – cables)	
<b>Detail Requirement: -</b>  In the target architecture, XAKTA shall provide report about how cabinet's primary ports are distributed over a MDF (verticals – cables).  Report will be provided with the below Fields <ul style="list-style-type: none"> <li>a. MDF Vertical</li> <li>b. Cable ID</li> <li>c. Minimum Port</li> <li>d. Maximum Port</li> <li>e. Cabinet</li> <li>f. Number of Ports</li> </ul>	
 <b>Note:</b>	


<b>ID#: XAKTA-BDA-005</b>	<b>Raised By: -</b>
<b>UR: DP to Cabinet connection report</b>	
<b>Current Flow:</b>  Circee Provides a report for Check Nodes Characteristics. This report provides information about a specific DP ports (port status - cabinet's secondary ports connected to them)	
<b>Detail Requirement: -</b>  System shall provide the possibility to generate a report for Check Nodes Characteristics. This report will provide information about a specific DP ports (port status - cabinet's secondary ports connected to them)  Report will be provided with the below Fields <ul style="list-style-type: none"> <li>a. Node Name</li> <li>b. Port Number</li> <li>c. MDF Name</li> <li>d. MDF Vertical</li> <li>e. Cabinet</li> </ul>	



Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

- f. Cabinet Primary Ports
- g. Cabinet Secondary Ports
- h. DP
- i. DP Port
- j. Number
- k. Status


 *Note:*


<b>ID#: XAKTA-BDA-006</b>	<b>Raised By: -</b>
<b>UR: Phone Numbers in DP/Cabinet/MDF</b>	
<b>Current Flow:</b>  Circee Provides a report for Network Node and Subscribers. This report provides information about phone numbers on a specific node	
<b>Detail Requirement: -</b>  System shall provide the possibility to generate a report for showing phone numbers that are linked to specific DP/Cabinet/MDF triplet  Report will be provided with the below Fields <ul style="list-style-type: none"> <li>a. Node Name</li> <li>b. Status</li> <li>c. Port Status</li> <li>d. Phone Number</li> </ul>	
 <i>Note:</i>	

<b>ID#: XAKTA-BDA-007</b>	<b>Raised By: -</b>
<b>UR: Unavailable Ports report</b>	
<b>Current Flow:</b>  Circee Provides a report for Network Node Waiting List. This report provides information about the failed reservation attempts due to unavailable ports at the level of Cabinet or DP.	
<b>Detail Requirement: -</b>  System shall provide the possibility to generate a report the failed reservation attempts due to unavailable ports at the level of Cabinet or DP.  Report will be provided with the below Fields	

Prepared (Subject resp)		No.		
Marwan Khoury		1029-FCP 132 1747		
Approved (Document resp)	Checked	Date	Rev	Reference
Ziad Hobeika		2018-07-10	D	

- a. Date
- b. Request Id
- c. DP Address
- d. Cabinet
- e. DP


 Note:

<b>ID#: XAKTA-BDA-008</b>	<b>Raised By: -</b>
<b>UR: DP List to Cabinet report</b>	
<b>Current Flow:</b>  Circee Provides a report for DP List connected to a Cabinet. This report provides information about the list of DPs connected to a specific cabinet)	
<b>Detail Requirement: -</b>  System shall provide the possibility to generate a report about the list of DPs connected to a specific cabinet.  Report will be provided with the below Fields <ul style="list-style-type: none"> <li>a. Cabinet Name</li> <li>b. DP Name</li> <li>c. DP number of Ports</li> <li>d. DP Ports Status summary (Active – Faulty – Free)</li> </ul>	
 Note:	

<b>ID#: XAKTA-BDA-009</b>	<b>Raised By: -</b>
<b>UR: Exchange resources report</b>	
<b>Current Flow:</b>  Circee Provides a report for Exchange Following Plan. This report provides information about a specific exchange capacity (number of installed devices (PSTN-ISDN-ADSL) - number of primary and secondary ports - waiting list...)	
<b>Detail Requirement:</b>  In the target architecture, XAKTA will provide report about a specific exchange capacity (number of installed devices (PSTN-ISDN) - number of primary and secondary ports - waiting list...)	
Report will be provided with the below Fields	

Prepared (Subject resp)		No.		
Marwan Khoury		1029-FCP 132 1747		
Approved (Document resp)	Checked	Date	Rev	Reference
Ziad Hobeika		2018-07-10	D	

- a- Province
- b- Switch Name
- c- Switch Vendor
- d- Switch Contract ID
- e- DSLAM Vendor
- f- DSLAM Contract ID
- g- Switch PSTN Capacity
- h- Switch ISDN Capacity
- i- Switch ADSL Capacity
- j- Idle PSTN
- k- Idle ISDN
- l- Idle ADSL
- m- PSTN usage ratio
- n- ISDN usage ratio
- o- ADSL usage ratio
- p- Primary Ports count
- q- Secondary Ports count
- r- Primary Ports /PSTN ratio
- s- Primary Ports/ ISDN ratio
- t- Primary Ports/ ADSL ratio
- u- Secondary Ports/ Primary Ports
- v- Waiting list Total Number

 *Note: Contract ID should be added by ST team in XAKTA (New field will be added to Switch)*

<b>ID#: XAKTA-BDA-010</b>	<b>Raised By: -</b>
<b>UR: Exchange Phone Numbers report</b>	
<b>Current Flow:</b>  Circee Provides a report for Exchange Numbering Plan Detail [Phone Number Selection]. This report provides information and details showing all phone numbers of a specific exchange	
<b>Detail Requirement: -</b>  System shall provide the possibility to generate a report for Exchange Numbering Plan Detail [Phone Number Selection]. This report will provide information and details showing all phone numbers of a specific exchange  Report will be provided with the below Fields  Header fields	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

- a. Province
- b. Name (Exchange Name or Cabinet Name) (based on selection)
- c. Code (based on selection)
- d. LAC (based on selection)
- e. Capacity (based on selection)

#### Details field

- a. Number
- b. Type
- c. Status
- d. Device Id
- e. Pilot Number (if PBX)
- f. Special (if CDMA)
- g. Special Device (if CDMA)


 *Note:*

<b>ID#: XAKTA-BDA-011</b>	<b>Raised By: -</b>
<b>UR: Exchange Devices report</b>	
<b>Current Flow:</b>  Circee Provides a report for Exchange Numbering Plan Detail [Device Selection]. This report provides information and details showing all devices of a specific exchange	
<b>Detail Requirement: -</b>  System shall provide the possibility to generate a report about all devices of a specific exchange  Report will be provided with the below Fields  Header fields <ul style="list-style-type: none"> <li>a. Province</li> <li>b. Exchange Name</li> <li>c. Code</li> <li>d. LAC</li> <li>e. Capacity</li> </ul> Details field <ul style="list-style-type: none"> <li>a. Device Id</li> <li>b. Type</li> <li>c. Status</li> <li>d. Number</li> </ul>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

- e. Pilot Number (if PBX)
- f. Special (if CDMA)
- g. Special Device (if CDMA)

 Note:

<b>ID#: XAKTA-BDA-012</b>	<b>Raised By: -</b>
<b>UR: Exchange Services report</b>	
<b>Current Flow:</b>  Circee Provides a report for Exchange Services. This report provides information about the available services on a specific exchange.	
<b>Detail Requirement: -</b>  System shall provide the possibility to generate a report about the available services on a specific exchange.  Report will be provided with the below Fields <ul style="list-style-type: none"> <li>a. Province</li> <li>b. Name</li> <li>c. Type</li> <li>d. Available Services</li> </ul>	
 Note:	

<b>ID#: XAKTA-BDA-013</b>	<b>Raised By: -</b>
<b>UR: MDF and Cabinet ports of specific Cable report</b>	
<b>Current Flow:</b>  Circee Provides a report for Cabinet MDF Cable This report provides information and details about MDF ports connected to a cabinet on a specific cable.	
<b>Detail Requirement: -</b>  In the target architecture, XAKTA will provide report about cabinet and MDF ports on a specific cable.  Report will be provided with the below Fields  Report Header	


Prepared (Subject resp)		No.		
Marwan Khoury		1029-FCP 132 1747		
Approved (Document resp)	Checked	Date	Rev	Reference
Ziad Hobeika		2018-07-10	D	

- a. Switch Name
- b. Cable.


#### Report Details

- a. MDF Vertical
- b. Cabinet Name
- c. Active Ports
- d. Free Ports
- e. Faulty Ports
- f. Reserved Ports
- g. Total Ports


 *Note:*

<b>ID#: XAKTA-BDA-014</b>	<b>Raised By: -</b>
<b>UR: Cabinet DP ports of specific Cable report</b>	
<b>Current Flow:</b>  Circee Provides a report for Cabinet DP Cable This report provides information DP ports connected to cabinets on a specific cable	
<b>Detail Requirement: -</b>  System shall provide the possibility to generate a report about Cabinet and DP ports connected to via a specific cable.  Report Header <ul style="list-style-type: none"> <li>a. Switch Name</li> <li>b. Cable</li> <li>c. Cabinet</li> </ul> Report Details <ul style="list-style-type: none"> <li>a. Cabinet Name</li> <li>b. DP</li> <li>c. Active Ports</li> <li>d. Free Ports</li> <li>e. Faulty Ports</li> <li>f. Reserved Ports</li> <li>g. Total Ports</li> </ul>	
 <i>Note:</i>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

<b>ID#: XAKTA-BDA-015</b>	<b>Raised By: -</b>
<b>UR: Province level resources report</b>	
<p><b>Current Flow:</b></p> <p>Circee Provides a report for DP and Cabinet. This report provides information at province level showing switches capacity - primary and secondary number of ports and status</p>	
<p><b>Detail Requirement: -</b></p> <p>System shall provide the possibility to generate a report at province level showing switches capacity - primary and secondary number of ports and status</p> <p>Report will be provided with the below Fields</p> <ul style="list-style-type: none"> <li>a. PROVINCE</li> <li>b. Site NAME</li> <li>c. PSTN SUB</li> <li>d. PSTN FREE</li> <li>e. SWITCH PSTN CAPACITY</li> <li>f. SITE PSTN CAPACITY</li> <li>g. ISDN SUB</li> <li>h. ISDN FREE</li> <li>i. SWITCH ISDN CAPACITY</li> <li>j. SITE ISDN CAPACITY</li> <li>k. SWITCH CAPACITY</li> <li>l. PRIMARY ACTIVE</li> <li>m. PRIMARY FREE</li> <li>n. PRIMARY FAULTY</li> <li>o. PRIMARY DEAD</li> <li>p. PRIMARY RESERVED</li> <li>q. PRIMARY ALL</li> <li>r. SECONDARY ACTIVE</li> <li>s. SECONDARY FREE</li> <li>t. SECONDARY FAULTY</li> <li>u. SECONDARY DEAD</li> <li>v. SECONDARY RESERVED</li> <li>w. SECONDARY ALL</li> </ul>	
<p> <b>Note:</b></p>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

<b>ID#: XAKTA-BDA-16</b>	<b>Raised By: -</b>
<b>UR: Port Status Change Report.</b>	
<b>Current Flow:</b>  N/A	
<b>Detail Requirement: -</b>  System shall provide the possibility to generate a daily and weekly report about end ports status changes (Cabinets & DPs) at the level of sites and provinces.  Report will be provided with the below Fields Header fields <ul style="list-style-type: none"> <li>a. Province</li> <li>b. Site</li> </ul> Details fields <ul style="list-style-type: none"> <li>a. Node Name</li> <li>b. Node Port</li> <li>c. Changed Date</li> <li>d. Changed By</li> </ul>	
 <i>Note:</i>	

<b>ID#: XAKTA-BDA-17</b>	<b>Raised By: -</b>
<b>UR: Detailed Cable Report</b>	
<b>Current Flow:</b>  N/A	
<b>Detail Requirement: -</b>  System shall provide the possibility to generate a report about cabinets and DPs connected to a specific cable in a Site.  Report will be provided with the below Fields <ul style="list-style-type: none"> <li>a. Switch Name</li> <li>b. Device ID</li> <li>c. Phone Number</li> <li>d. MDF</li> <li>e. MDF Vertical</li> <li>f. Cable ID</li> <li>g. Cabinet Name</li> <li>h. Primary Port</li> </ul>	



Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference


- i. Secondary Port
- j. DP Name
- k. DP Port
- l. Status

 Note:

<b>ID#: XAKTA-BDA-018</b>	<b>Raised By: -</b>
<b>UR: Exchange Numbering Plan</b>	
<p><b>Current Flow:</b></p> <p>Circee Provides a report for Exchange Numbering Plan. This report provides information about a specific exchange's Phone Numbers (total - status)</p>	
<p><b>Detail Requirement:</b></p> <p>System shall provide the possibility to generate a report about a specific exchange's Phone Numbers (total - status)</p> <p>Report will be provided with the below Fields</p> <p>Header fields</p> <ul style="list-style-type: none"> <li>a. Province</li> <li>b. Switch Name</li> <li>c. Code</li> <li>d. Type</li> <li>e. Parent</li> <li>f. LAC</li> <li>g. Capacity</li> </ul> <p>Details field</p> <ul style="list-style-type: none"> <li>h. Type</li> <li>i. number range ( from phone number to phone number)</li> <li>j. Number classification (N: normal, G: Gold , P:Platinum, D:Diamond, S: Silver)</li> <li>k. Free numbers count per each category</li> <li>l. Reserved numbers count per each category</li> <li>m. Deported Reservation count per each category</li> <li>n. Active Numbers count per each category</li> <li>o. Block Numbers count per each category</li> <li>p. Error Numbers count per each category</li> <li>q. Broken Numbers count per each category</li> <li>r. Not assigned Numbers count per each category</li> <li>s. Total count of Numbers</li> </ul>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

 <i>Note:</i>
--

<b>ID#: XAKTA-BDA-019</b>	<b>Raised By: -</b>
<b>UR: Exchange Waiting List</b>	
<p><b>Current Flow:</b></p> <p>Circee Provides a report for Exchange Waiting List]. This report provides information and details showing the unsuccessful reservations due to unavailable DP port.</p>	
<p><b>Detail Requirement: -</b></p> <p>System shall provide the possibility to generate a report showing the unsuccessful reservations due to unavailable DP port.</p> <p>Report will be provided with the below Fields</p> <p>Header fields</p> <ul style="list-style-type: none"> <li>a. Province</li> <li>b. Exchange Name</li> <li>c. Code</li> <li>d. LAC</li> <li>e. Capacity</li> <li>f. Cabinet</li> <li>g. DP</li> </ul>	
 <i>Note:</i>	


<b>ID#: XAKTA-BDA-020</b>	<b>Raised By: -</b>
<b>UR: Exchange Device</b>	
<p><b>Current Flow:</b></p> <p>Circee Provides a report for Exchange Device. This report provides information and details showing all devices of a specific exchange.</p>	
<p><b>Detail Requirement: -</b></p> <p>System shall provide the possibility to generate a report showing all devices of a specific exchange.</p>	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

Report will be provided with the below Fields

- a. Province
- b. Switch Name
- c. Parent Switch
- d. Equipment type
- e. Equipment ID
- f. Number
- g. Date
- h. Status

 Note:

<b>ID#: XAKTA-BDA-021</b>	<b>Raised By: -</b>
<b>UR: Free Ports in CSO/Cabinet/DP</b>	
<b>Current Flow:</b>  N/A	
<b>Detail Requirement: -</b>  System shall provide the possibility to generate a report showing the free ports in Cabinet/DP per CSO.  Report will be provided with the below Fields <ul style="list-style-type: none"> <li>a. Cabinet Name</li> <li>b. DP Name</li> <li>c. Sum of free Ports per Dp.</li> </ul>	
 Note:	

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

### 3 Reference

1	Invoice Layout Format	New_Sample_invoice.docx
2	Product Catalog	Master_ST_PC_Postpaid_Offers_RevE.xlsx
4	Payment file format where "IOH_Output_File_Format" is the file from BSCS towards any financial institute and "PIH_Input_File_Format" is the file format required from any financial institute towards BSCS.	IOH_Output_File_Format.txt PIH_Input_File_Format.txt
6	Ericsson Switches CDR Data Structure	Ericsson_Transit.asn1
7	Samsung Switches UMR Data Structure	Samsung UMR Description.txt
9	Siemens Switches CDR Data Structure	SiemensEWSD17ama.asn1
10	Huawei ATS CDR Description	Description of ATS9900 CDRs.xlsx
11	Huawei AAA CDR Description	Huawei AAA CDR Description.xlsx
12	ZTE CDR Data Description	ZTE IN CDR Description.pdf
13	Supported Ericsson and Siemens PSTN Services for Online Provisioning	ST-Switches-MML Commands-RevA.xls
14	Supported IMS Services for Online Provisioning	IMS service command for STE V2.8.xlsx
15	Receipt Format	receipt(voice_intallment_adsl_fttb_ip_tv_all).docx receipt(voice_intallment_adsl_fttb_ip_tv_all) by cheque.docx
17	AAA SOAP Use Cases	Huawei AAA 5.5 SOAP Interface – brief.docx
18	Supported Huawei DSLAM services for Online Provisioning	iManager U2000 V200R016C60CP2001 TL1 NBI User Guide 01.pdf
19	Tax matrix	Tax Matrix - RevD.xlsx

Prepared (Subject resp) Marwan Khoury		No. 1029-FCP 132 1747		
Approved (Document resp) Ziad Hobeika	Checked	Date 2018-07-10	Rev D	Reference

## Approval

This document has been duly signed by the Parties in two originals and the Parties have taken one each.

**Syrian Telecom**

**Ericsson**

Date (yymmdd): .....

Date (yymmdd): .....

Place: .....

Place: .....

Signature: .....

Signature: .....

Name: .....

Name: .....

Title: .....

Title: .....