

ISITEP

D5.2.1 – ADAPTATION/COMMUNICATION MANAGER TEST REPORT

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Publishable extended abstract

This deliverable provides the test report of the Communication Manager (CM), which is one of the software components of the ISITEP enhanced terminal software architecture.

It describes for every test case the actions to be executed and the associated expected results.

The tests described in this document were designed and executed by simulating all the software and hardware components of the enhanced terminal software architecture except the CM itself.

In particular, CM app was deployed on a Samsung Galaxy S4 with Android 4.4.

The following simulators apps are developed and deployed on test device to enable the execution of unit tests of the CM:

- Security Manager Simulator
- Added-Value Apps Simulator
- Tetra / Tetrapol Simulator
- Tetra HMI Simulator
- Tetrapol HMI Simulator

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1. INTRODUCTION

1.1 Introduction

This chapter will provide a description of the sequential ISITEP work structure and general scope of the work.

1.2 Purpose

The purpose of this document is to provide the acceptance test cases for the WP 5.2 (Adaptation communication manager). It describes for every test case the actions to be executed and the associated expected results.

1.3 Scope

The main goal of this document is to list and describe the test cases related to Adaptation communication manager. All faults will be reported in the fault database.

1.4 Responsibilities

The Creator of this document is a Testing Engineer whose responsibility is to describe a consistent Test Plan.

The Approver is the System & Verification Team Leader or his/her deputy.

2. TESTING ENVIRONMENT

2.1 Test Environment Architecture

The tests described in this document were designed and executed by simulating all the software and hardware components of the enhanced terminal software architecture except the CM itself. In particular, CM app was deployed and tested on a Samsung Galaxy S4 with Android 4.4. The simulators apps described in the following paragraphs are developed and deployed on test device to enable the execution of unit tests of the CM.

2.1.1 Security Manager Simulator

The app *ISITEP_SecManager.apk* is the SM Simulator. it's necessary to "unlock " the CM from the BLOCKED state.

2.1.2 Added-Value Apps Simulator

The app *ISITEP_apps.apk* :is the Added-Value App Simulator. It displays an icon on the device status bar to indicate the status of the Value app.

2.1.3 Tetra / Tetrapol Simulator

The app *ISITEP_Simulator.apk* : is the simulator of networks Tetra/Tetrapol apps. This App sends and receives to/from CM App the following messages:

Messages received from CM

- activateServiceRequest is used by the CM App to request App to transition to the "activated" state.
- deactivateServiceRequest is used by the CM to request the TETRA/TETRAPOL App to transition to the "deactivated" state

Messages sent to CM

- Unsolicited notification by the App in order to inform CM App which are the available services on the TETRA / TETRAPOL infrastructures
- activateServiceConfirm sent by App when TETRA (TETRAPOL) service has been requested for activation.
- deactivateServiceConfirm sent by App when TETRA (TETRAPOL) service has been requested for deactivation

2.1.4 Tetra HMI Simulator

The app *ISITEP_Tetra.apk* is the simulator of Tetra HMI. it displays a GUI that simulates the Tetra Call Interface

2.1.5 Tetrapol HMI Simulator

The app *ISITEP_Tetrapol.apk* is the simulator of Tetrapol HMI it displays a GUI that simulates the Tetrapol Call Interface

3. TEST CASE

3.1 Installation and Communication Manager service activation

3.1.1 IS-CM001 - CM installation procedure

Installation and Communication Manager service activation	
IS-CM001	
CM installation procedure	
Objective(s)	
To verify that Communication Manager can to be installed as apk file over a smartphpone.	
Pre-Conditions	
<ul style="list-style-type: none"> o Smartphone with Android version 4.4 	
Test procedure	
Action	Expected Result
1 Copy on "download" folder on smartphone the file: CommunicationManager.apk	File is correctly saved
Click on CommunicationManager.apk and follow installation instruction	A the end of procedure CommunicationManager.apk will be displayed message about CommunicationManager is correctly installed.
Comments	

3.1.2 IS-CM0012- CM service start

Installation and Communication Manager service activation		
IS-CM002		
CM service start		
Objective(s)		
To verify that Communication Manager starts automatically at the smartphone boot.		
Pre-Conditions		
<ul style="list-style-type: none"> ○ Smartphone with Android version 4.4 ○ CM is correctly installed 		
Test procedure		
Action	Expected Result	
1	Reboot smartphone	Smartphone boots correctly
2	Check on running application list	Communication manager application was automatically started at phone boot
Comments		

3.2 Interface between CM App and TETRA/TETRAPOL App

3.2.1 CT-IF001 – CM receives from TETRA networkAvailabilityIndication set to true

Interface between CM App and TETRA/TETRAPOL App	
CT-IF001	
CM App receives from TETRA app an unsolicited networkAvailabilityIndication set to true	
Objective(s)	
To verify that if Tetra App is available an unsolicited networkAvailabilityIndication with acknack set to true is sent to CM App	
Pre-Conditions	
<ul style="list-style-type: none"> ○ Smartphone with Android version 4.4 ○ Following App are installed on smartphone: isitep simulator, isitep Preferences, Communication manager installed ○ CM is in NOT_ACTIVE_APP ○ Tetra is preferred network 	
Test procedure	
Action	Expected Result
1 From isitep simulator app click on checkbox "Tetra Available"	<ul style="list-style-type: none"> • On text box on the right of checkbox "Tetra Available" it is displayed the SeqID (sequence ID of session); • Tetra App simulator sends to CM App a networkAvailabilityIndication with following information: <ul style="list-style-type: none"> - serviceProviderName: Tetra - Acknack: true
Comments	

3.2.2 CT-IF002 – CM receives from TETRA networkAvailabilityIndication set to false

Interface between CM App and TETRA/TETRAPOL App	
CT-IF002	
CM App receives from TETRA app an unsolicited networkAvailabilityIndication set to false	
Objective(s)	
To verify that if Tetra App is not available an unsolicited networkAvailabilityIndication with acknack set to false is sent to CM App	
Pre-Conditions	
<ul style="list-style-type: none"> ○ Smartphone with Android version 4.4 ○ Following App are installed on smartphone: isitep simulator, isitep Preferences, Communication manager installed ○ CM is in ACTIVE_APP status ○ Tetra is preferred network 	
Test procedure	
Action	Expected Result
1 From isitep simulator app unselect the checkbox "Tetra Available"	<ul style="list-style-type: none"> • Tetra App simulator sends to CM App a networkAvailabilityIndication with following information: <ul style="list-style-type: none"> - serviceProviderName: Tetra - Acknack: false
Comments	

3.2.3 CT-IF003 – CM receives from TETRAPOL networkAvailabilityIndication set to true

Interface between CM App and TETRA/TETRAPOL App	
CT-IF003	
CM App receives from TETRAPOL app an unsolicited networkAvailabilityIndication set to true	
Objective(s)	
To verify that if Tetrapol App is available an unsolicited networkAvailabilityIndication with acknack set to true is sent to CM App	
Pre-Conditions	
<ul style="list-style-type: none"> ○ Smartphone with Android version 4.4 ○ Following App are installed on smartphone: isitep simulator, isitep Preferences, Communication manager installed ○ CM is in NOT_ACTIVE_APP ○ Tetrapol is preferred network 	
Test procedure	
Action	Expected Result
1 From isitep simulator app click on checkbox "Tetrapol Available"	<ul style="list-style-type: none"> • On text box on the right of checkbox "Tetrapol Available" it is displayed the SeqID (sequence ID of session); • Tetra App simulator sends to CM App a networkAvailabilityIndication with following information: <ul style="list-style-type: none"> - serviceProviderName: Tetrapol - Acknack: true
Comments	

3.2.4 CT-IF004 – CM receives from TETRAPOL networkAvailabilityIndication set to false

Interface between CM App and TETRA/TETRAPOL App	
CT-IF004	
CM App receives from TETRAPOL app an unsolicited networkAvailabilityIndication set to false	
Objective(s)	
To verify that if Tetrapol app is not available an unsolicited networkAvailabilityIndication with acknack set to false is sent to CM App	
Pre-Conditions	
<ul style="list-style-type: none"> ○ Smartphone with Android version 4.4 ○ Following App are installed on smartphone: isitep simulator, isitep Preferences, Communication manager installed ○ CM is in ACTIVE_APP status ○ Tetrapol is preferred network 	
Test procedure	
Action	Expected Result
1 From isitep simulator app unselect the checkbox "Tetrapol Available"	<ul style="list-style-type: none"> • Tetrapol App simulator sends to CM App a networkAvailabilityIndication with following information: <ul style="list-style-type: none"> - serviceProviderName: Tetrapol - Acknack: false
Comments	

3.2.5 CT-IF005 – CM App sends an activateServiceRequest to TETRA App

Interface between CM App and TETRA/TETRAPOL App	
CT-IF005	
CM App sends an activateServiceRequest to TETRA App	
Objective(s)	
To verify that if solicited by user CM app sends an activateServiceRequest to request the TETRA App to transition to the “activated” state.	
Pre-Conditions	
<ul style="list-style-type: none"> ○ CM is in NOT_ACTIVE_APP ○ Tetra is preferred network ○ Smartphone with Android version 4.4 ○ Following App are installed on smartphone: isitep simulator, isitep Preferences, Communication manager installed 	
Test procedure	
Action	Expected Result
1 From isitep simulator app click on checkbox “Tetra Available”	<ul style="list-style-type: none"> • On text box on the right of checkbox “Tetra Available” it is displayed the the SeqID (sequence ID of session); • Tetra App simulator sends to CM App a networkAvailabilityIndication with following information: <ul style="list-style-type: none"> - serviceProviderName: Tetra - Acknack: true • Without any further user action: CM app sends to Tetra App simulator an activateServiceRequest with following information: <ul style="list-style-type: none"> - serviceProviderName: Tetra - seqID: (one reported on text box in isitep_simulator) • On smartphone it is displayed a notification that report that CM app reaches ACTIVATING_APP status
Comments	

3.2.6 CT-IF006 – TETRA App returns to CM App an activateServiceConfirm

Interface between CM App and TETRA/TETRAPOL App	
CT-IF006	
TETRA App returns to CM App an activateServiceConfirm	
Objective(s)	
To verify that if TETRA app receives a activateServiceRequest returns to CM App an activateServiceConfirm with acknack set to true.	
Pre-Conditions	
<ul style="list-style-type: none"> ○ Smartphone with Android version 4.4 ○ Following App are installed on smartphone: isitep simulator, isitep Preferences, Communication manager installed ○ CM is in NOT_ACTIVE_APP ○ Tetra is preferred network 	
Test procedure	
Action	Expected Result
1 From isitep simulator app click on checkbox "Tetra Available"	<ul style="list-style-type: none"> • On text box on the right of checkbox "Tetra Available" it is displayed the the SeqID (sequence ID of session); • Tetra App simulator sends to CM App a networkAvailabilityIndication with following information: <ul style="list-style-type: none"> - serviceProviderName: Tetra - Acknack: true • Without any further user action: CM app sends to Tetra App simulator an activateServiceRequest with following information: <ul style="list-style-type: none"> - serviceProviderName: Tetra - seqID: (one reported on text box in isitep_simulator) • On smartphone it is displayed a notification that report that CM app reaches ACTIVATING_APP status • After around 3 seconds Tetra App simulator sends to CM App a activateServiceConfirm with following information: <ul style="list-style-type: none"> - serviceProviderName: Tetra - Acknack: true - seqId: (one reported on text box in

		isitep_simulator)
2	Check on smartphone bar notification	<ul style="list-style-type: none">On smartphone it is displayed a notification that report that CM app reaches ACTIVE_APP status
Comments		

3.2.7 CT-IF007 – CM App sends a deactivateServiceRequest to TETRA App

Interface between CM App and TETRA/TETRAPOL App	
CT-IF007	
CM App sends a deactivateServiceRequest to TETRA App	
Objective(s)	
To verify that if solicited by user CM app sends an deactivateServiceRequest to request the TETRA App to transition to the “deactivated” state.	
Pre-Conditions	
<ul style="list-style-type: none"> ○ Smartphone with Android version 4.4 ○ Following App are installed on smartphone: isitep simulator, isitep Preferences, Communication manager installed ○ ACTIVE_APP on Tetra network ○ Tetra is preferred network ○ Checkbox “Tetra Available” is checked on isitep simulator 	
Test procedure	
Action	Expected Result
1 From isitep simulator app uncheck the checkbox “Tetra Available”	<ul style="list-style-type: none"> • Tetrapol App simulator sends to CM App a networkAvailabilityIndication with following information: <ul style="list-style-type: none"> - serviceProviderName: Tetrapol - Acknack: false • Without any further user action: CM app sends to Tetra App simulator an deactivateServiceRequest with following information: <ul style="list-style-type: none"> - serviceProviderName: Tetra - seqID: (same number reported on text box in isitep_simulator)
Comments	

3.2.8 CT-IF008 – TETRA App returns to CM App an deactivateServiceConfirm

Interface between CM App and TETRA/TETRAPOL App	
CT-IF008	
TETRA App returns to CM App an deactivateServiceConfirm	
Objective(s)	
To verify that if TETRA app receives a deactivateServiceRequest returns to CM App an activateServiceConfirm with acknack set to true.	
Pre-Conditions	
<ul style="list-style-type: none"> ○ Smartphone with Android version 4.4 ○ Following App are installed on smartphone: isitep simulator, isitep Preferences, Communication manager installed ○ ACTIVE_APP on Tetra network ○ Tetra is preferred network ○ Checkbox “Tetra Available” is checked on isitep simulator 	
Test procedure	
Action	Expected Result
1 From isitep simulator app uncheck the checkbox “Tetra Available”	<ul style="list-style-type: none"> • Tetra App simulator sends to CM App a networkAvailabilityIndication with following information: <ul style="list-style-type: none"> - serviceProviderName: Tetra - Acknack: false • Without any further user action: CM app sends to Tetra App simulator an deactivateServiceRequest with following information: <ul style="list-style-type: none"> - serviceProviderName: Tetra - seqID: (one reported on text box in isitep_simulator) • After around 3 seconds Tetra App simulator sends to CM App a activateServiceConfirm with following information: <ul style="list-style-type: none"> - serviceProviderName: Tetra - Acknack: true seqId: (one reported on text box in isitep_simulator)
2 Check on smartphone bar notification	<ul style="list-style-type: none"> • On smartphone it is displayed a notification that report that CM app reaches NOT_ACTIVE_APP status

Comments

3.2.9 CT-IF009 – CM App sends an activateServiceRequest to TETRAPOL App

Interface between CM App and TETRA/TETRAPOL App	
CT-IF009	
CM App sends an activateServiceRequest to TETRAPOL App	
Objective(s)	
To verify that if solicited by user CM app sends an activateServiceRequest to request the TETRAPOL App to transition to the “activated” state.	
Pre-Conditions	
<ul style="list-style-type: none"> ○ Smartphone with Android version 4.4 ○ Following App are installed on smartphone: isitep simulator, isitep Preferences, Communication manager installed ○ CM is in NOT_ACTIVE_APP ○ Tetrapol is preferred network 	
Test procedure	
Action	Expected Result
1 From isitep simulator app click on checkbox “Tetrapol Available”	<ul style="list-style-type: none"> • On text box on the right of checkbox “Tetrapol Available” it is displayed the the SeqID (sequence ID of session); • Tetra App simulator sends to CM App a networkAvailabilityIndication with following information: <ul style="list-style-type: none"> - serviceProviderName: Tetrapol - Acknack: true • Without any further user action: CM app sends to Tetrapol App simulator an activateServiceRequest with following information: <ul style="list-style-type: none"> - serviceProviderName: Tetrapol - seqID: (one reported on text box in isitep_simulator) • On smartphone it is displayed a notification that report that CM app reaches ACTIVATING_APP status
Comments	

3.2.10 CT-IF010 – TETRAPOL App returns to CM App an activateServiceConfirm

Interface between CM App and TETRA/TETRAPOL App	
CT-IF010	
TETRAPOL App returns to CM App an activateServiceConfirm	
Objective(s)	
To verify that if TETRAPOL app receives a activateServiceRequest returns to CM App an activateServiceConfirm with acknack set to true.	
Pre-Conditions	
<ul style="list-style-type: none"> ○ Smartphone with Android version 4.4 ○ Following App are installed on smartphone: isitep simulator, isitep Preferences, Communication manager installed ○ CM is in NOT_ACTIVE_APP ○ Tetrapol is preferred network 	
Test procedure	
Action	Expected Result
1 From isitep simulator app click on checkbox "Tetrapol Available"	<ul style="list-style-type: none"> • On text box on the right of checkbox "Tetrapol Available" it is displayed the the SeqID (sequence ID of session); • Tetra App simulator sends to CM App a networkAvailabilityIndication with following information: <ul style="list-style-type: none"> - serviceProviderName: Tetrapol - Acknack: true • Without any further user action: CM app sends to Tetrapol App simulator an activateServiceRequest with following information: <ul style="list-style-type: none"> - serviceProviderName: Tetrapol - seqID: (one reported on text box in isitep_simulator) • On smartphone it is displayed a notification that report that CM app reaches ACTIVATING_APP status • After around 3 seconds Tetra App simulator sends to CM App a activateServiceConfirm with following information: <ul style="list-style-type: none"> - serviceProviderName: Tetra - Acknack: true - seqId: (one reported on text box in

		isitep_simulator)
2	Check on smartphone notification bar	<ul style="list-style-type: none">On smartphone it is displayed a notification that report that CM app reaches ACTIVE_APP status
Comments		
Xxx		

3.2.11 CT-IF011 – CM App sends a deactivateServiceRequest to TETRAPOL App

Interface between CM App and TETRA/TETRAPOL App	
CT-IF011	
CM App sends a deactivateServiceRequest to TETRAPOL App	
Objective(s)	
To verify that if solicited by user CM app sends an deactivateServiceRequest to request the TETRAPOL App to transition to the “deactivated” state.	
Pre-Conditions	
<ul style="list-style-type: none"> ○ Smartphone with Android version 4.4 ○ Following App are installed on smartphone: isitep simulator, isitep Preferences, Communication manager installed ○ ACTIVE_APP on Tetrapol network ○ Tetrapol is preferred network ○ Checkbox “Tetrapol Available” is checked on isitep simulator 	
Test procedure	
Action	Expected Result
1 From isitep simulator app uncheck the checkbox “Tetrapol Available”	<ul style="list-style-type: none"> • Tetrapol App simulator sends to CM App a networkAvailabilityIndication with following information: <ul style="list-style-type: none"> - serviceProviderName: Tetrapol - Acknack: false • Without any further user action: CM app sends to Tetrapol App simulator an deactivateServiceRequest with following information: <ul style="list-style-type: none"> - serviceProviderName: Tetrapol - seqID: (one reported on text box in isitep_simulator)
Comments	
xxx	

3.2.12 CT-IF012 – TETRAPOL App returns to CM App an deactivateServiceConfirm

Interface between CM App and TETRA/TETRAPOL App	
CT-IF012	
TETRAPOL App returns to CM App an deactivateServiceConfirm	
Objective(s)	
To verify that if TETRAPOL app receives a deactivateServiceRequest returns to CM App an activateServiceConfirm with acknack set to true.	
Pre-Conditions	
<ul style="list-style-type: none"> ○ Smartphone with Android version 4.4 ○ Following App are installed on smartphone: isitep simulator, isitep Preferences, Communication manager installed ○ ACTIVE_APP on Tetrapol network ○ Tetrapol is preferred network ○ Checkbox “Tetrapol Available” is checked on isitep simulator 	
Test procedure	
Action	Expected Result
1 From isitep simulator app unckeck the checkbox “Tetrapol Available”	<ul style="list-style-type: none"> • Tetrapol App simulator sends to CM App a networkAvailabilityIndication with following information: <ul style="list-style-type: none"> - serviceProviderName: Tetrapol - Acknack: false • Without any further user action: CM app sends to Tetrapol App simulator an deactivateServiceRequest with following information: <ul style="list-style-type: none"> - serviceProviderName: Tetrapol - seqID: (one reported on text box in isitep_simulator) • After around 3 seconds Tetrapol App simulator sends to CM App a deactivateServiceConfirm with following information: <ul style="list-style-type: none"> - serviceProviderName: Tetrapol - Acknack: true - seqId: (one reported on text box in isitep_simulator)
2 Check on smartphone notification bar	<ul style="list-style-type: none"> • On smartphone it is displayed a notification that report that CM app reaches NOT_ACTIVE_APP status

Comments

3.3 Interface between CM App and Added value App

3.3.1 CA-IF001 – Added Value App sends a commServiceAvailRequest() to CM App

Interface between CM App and Added value App	
CA-IF001	
Added Value App sends a commServiceAvailRequest() to CM App	
Objective(s)	
To verify that if solicited by user value App sends a commServiceAvailRequest to CM app	
Pre-Conditions	
<ul style="list-style-type: none"> ○ Smartphone with Android version 4.4 ○ Communication manager is installed on smartphone ○ Following simulator are installed on smartphone: isitep_simulator, ISITEP_SecManager, isitep Preferences, isitep_phone 	
Test procedure	
Action	Expected Result
1 Open app isitep phone interface	Added Value App sends a commServiceAvailRequest() to CM App
Comments	

3.3.2 CA-IF002 – CM returns a commServiceAvailIndication TETRA App is available

Interface between CM App and Added value App	
CA-IF002	
CM returns a commServiceAvailIndication TETRA App is available	
Objective(s)	
To verify that if CM app receives a commServiceAvailRequest and if TETRA app is available returns to Added Value App a commServiceAvailIndication with acknack set to true and MNC/MCC associated to TETRA network.	
Pre-Conditions	
<ul style="list-style-type: none"> ○ Smartphone with Android version 4.4 ○ Communication manager is installed on smartphone ○ Following simulator are installed on smartphone: isitep_simulator, ISITEP_SecManager, isitep Preferences, isitep_phone ○ CM is in ACTIVE_APP status ○ Tetra is preferred network 	
Test procedure	
Action	Expected Result
1 Open smartphone notification bar	It will be displayed following notification: ACTIVE_APP cmStatus is now ACTIVE_APP
2 Open ISITEP_Simulator	It is selected checkbox: Tetra Available
3 Open app isitep phone interface	<ul style="list-style-type: none"> • Added Value App sends a commServiceAvailRequest() to CM App • CM returns a commServiceAvailIndication TETRA App is available • It will be display string: "TETRA PHONE GUI"
Comments	

3.3.3 CA-IF003 – CM returns a commServiceAvailIndication TETRA App is available

Interface between CM App and Added value App	
CA-IF003	
CM returns a commServiceAvailIndication TETRAPOL App is available	
Objective(s)	
To verify that if CM app receives a commServiceAvailRequest and if TETRAPOL app is available returns to Added Value App a commServiceAvailIndication with acknack set to true and MNC/MCC associated to TETRAPOL network.	
Pre-Conditions	
<ul style="list-style-type: none"> ○ Smartphone with Android version 4.4 ○ Communication manager is installed on smartphone ○ Following simulator are installed on smartphone: isitep_simulator, ISITEP_SecManager, isitep Preferences, isitep_phone ○ CM is in ACTIVE_APP status ○ Tetrapol is preferred network 	
Test procedure	
Action	Expected Result
1 Open smartphone notification bar	It will be displayed following notification: ACTIVE_APP cmStatus is now ACTIVE_APP
2 Open ISITEP_Simulator	It is selected checkbox: Tetrapol Available
3 Open app isitep phone interface	<ul style="list-style-type: none"> • Added Value App sends a commServiceAvailRequest() to CM App • CM returns a commServiceAvailIndication TETRA App is available • It will be display string: "TETRAPOL PHONE GUI"
Comments	
xxx	

3.3.4 CA-IF004 – CM returns a commServiceAvailIndication No service is available

Interface between CM App and Added value App	
CA-IF004	
CM returns a commServiceAvailIndication No service is available	
Objective(s)	
To verify that if CM app receives a commServiceAvailRequest and no service is available returns to Added Value App a commServiceAvailIndication with acknack set to false.	
Pre-Conditions	
<ul style="list-style-type: none"> ○ Smartphone with Android version 4.4 ○ Communication manager is installed on smartphone ○ Following simulator are installed on smartphone: isitep_simulator, ISITEP_SecManager, isitep Preferences, isitep_phone ○ CM is in NOT_ACTIVE_APP status 	
Test procedure	
Action	Expected Result
1 Open smartphone notification bar	It will be displayed following notification: ACTIVE_APP cmStatus is now NOT_ACTIVE_APP
2 Open app isitep phone interface	<ul style="list-style-type: none"> • Added Value App sends a commServiceAvailRequest() to CM App • CM returns a commServiceAvailIndication no service is available • It will be display waring popup: “No service Available”
Comments	

3.4 CM App State Machine

3.4.1 SM-001 – CM App in NOT_ACTIVE_APP status(app restart with no net available)

CM App State Machine	
SM-001	
CM App is in NOT_ACTIVE_APP status	
Objective(s)	
To verify that CM app reaches NOT_ACTIVE_APP status on following cases: the CM Service starts or restarts and not network are available;	
Pre-Conditions	
<ul style="list-style-type: none"> ○ Smartphone with Android version 4.4 ○ Communication manager is installed on smartphone ○ Following simulator are installed on smartphone: isitep_simulator, ISITEP_SecManager, isitep Preferences, isitep_phone ○ No network are available 	
Test procedure	
Action	Expected Result
1 Open ISITEP_simulator and deselect all checkbox	All checkbox are corrected deselected
2 Restart smartphone	<ul style="list-style-type: none"> • On phone restart Tetra and Tetrapol App sends to CM App an unsolicited networkAvailabilityIndication with acknack set to false.
Check on smartphone notification bar	It is shown following message: NOT_ACTIVE_APP cmStatus is now NOT_ACTIVE_APP
Comments	

3.4.2 SM-002 – CM App in NOT_ACTIVE_APP status(after a deactivation)

CM App State Machine	
SM-002	
CM App is in NOT_ACTIVE_APP status	
Objective(s)	
To verify that CM app reaches NOT_ACTIVE_APP status on following cases:	
<ul style="list-style-type: none"> - the CM Service starts or restarts and not network are available; - the CM successfully deactivates the current active network app; - the activation of a network app fails. 	
Pre-Conditions	
<ul style="list-style-type: none"> o Smartphone with Android version 4.4 o Communication manager is installed on smartphone o Following simulator are installed on smartphone: isitep_simulator, ISITEP_SecManager, isitep Preferences, isitep_phone o ACTIVE_APP on Tetrapol or Tetra network o Checkbox “Tetrapol Available” or “Tetra Available” is checked on isitep simulator 	
Test procedure	
Action	Expected Result
1 From isitep simulator app uncheck the selected checkbox “Tetrapol Available” or “Tetra Available”	<ul style="list-style-type: none"> • Tetrapol App (or Tetra App) simulator sends to CM App a networkAvailabilityIndication with following information: <ul style="list-style-type: none"> - serviceProviderName: Tetrapol (or Tetra) - Acknack: false • Without any further user action: CM app sends to Tetrapol App simulator an deactivateServiceRequest with following information: <ul style="list-style-type: none"> - serviceProviderName: Tetrapol (or Tetra) - seqID: (one reported on text box in isitep_simulator) • After around 3 seconds Tetrapol App simulator (or Tetra App simulator) sends to CM App a deactivateServiceConfirm with following information: <ul style="list-style-type: none"> - serviceProviderName: Tetrapol - Acknack: true

		- seqId: (one reported on text box in isitep_simulator)
2	Check on smartphone notification bar	It is shown following message: NOT_ACTIVE_APP cmStatus is now NOT_ACTIVE_APP
Comments		
xxx		

3.4.3 SM-003 – CM App is in ACTIVATING_APP status

CM App State Machine	
SM-002	
CM App is in ACTIVATING_APP status	
Objective(s)	
To verify that CM app reaches ACTIVATING_APP after sending the activateServiceRequest message and before it receives the activateServiceConfirm message (positive or negative) or a timeout expires without receiving the activateServiceConfirm message.	
Pre-Conditions	
<ul style="list-style-type: none"> ○ Smartphone with Android version 4.4 ○ Communication manager is installed on smartphone ○ Following simulator are installed on smartphone: isitep_simulator, ISITEP_SecManager, isitep Preferences, isitep_phone ○ CM is in status NOT_ACTIVE_APP 	
Test procedure	
Action	Expected Result
1 From isitep simulator app click on checkbox “Tetra Available” (or “Tetrapol Available”)	<ul style="list-style-type: none"> • On text box on the right of checkbox “Tetra Available” (or “Tetrapol Available”) it is displayed the the SeqID (sequence ID of session); • Tetra App simulator sends to CM App a networkAvailabilityIndication with following information: <ul style="list-style-type: none"> - serviceProviderName: Tetra (or Tetrapol) - Acknack: true • Without any further user action: CM app sends to Tetra (or Tetrapol) App simulator an activateServiceRequest with following information: <ul style="list-style-type: none"> - serviceProviderName: Tetra (or Tetrapol) - seqID: (one reported on text box in isitep_simulator) • On smartphone it is displayed a notification that report that CM app reaches ACTIVATING_APP status
Check on smartphone notification bar	It is shown following message: ACTIVATING_APP

	cmStatus is now ACTIVING_APP
Comments	
XXX	

3.4.4 SM-004 – CM App is in ACTIVE_APP status

CM App State Machine	
SM-003	
CM App is in ACTIVE_APP status	
Objective(s)	
To verify that CM app reaches ACTIVE_APP status if a PPDR network app is active.	
Pre-Conditions	
<ul style="list-style-type: none"> ○ Smartphone with Android version 4.4 ○ Communication manager is installed on smartphone ○ Following simulator are installed on smartphone: isitep_simulator, ISITEP_SecManager, isitep Preferences, isitep_phone ○ CM is in status NOT_ACTIVE_APP 	
Test procedure	
Action	Expected Result
1 From isitep simulator app click on checkbox “Tetra Available” (or “Tetrapol Available”)	<ul style="list-style-type: none"> • On text box on the right of checkbox “Tetra Available” (or “Tetrapol Available”) it is displayed the the SeqID (sequence ID of session); • Tetra App simulator sends to CM App a networkAvailabilityIndication with following information: <ul style="list-style-type: none"> - serviceProviderName: Tetra (or Tetrapol) - Acknack: true • Without any further user action: CM app sends to Tetra (or Tetrapol) App simulator an activateServiceRequest with following information: <ul style="list-style-type: none"> - serviceProviderName: Tetra (or Tetrapol) - seqID: (one reported on text box in isitep_simulator) • On smartphone it is displayed a notification that report that CM app reaches ACTIVATING_APP status • After around 3 seconds Tetra App simulator sends to CM App a activateServiceConfirm with following information: <ul style="list-style-type: none"> - serviceProviderName: Tetra (or Tetrapol)

		<ul style="list-style-type: none"> - Acknack: true - seqId: (one reported on text box in isitep_simulator) • On smartphone it is displayed a notification that report that CM app reaches ACTIVE_APP status
	Check on smartphone notification bar	It is shown following message: ACTIVE_APP cmStatus is now ACTIVE_APP
Comments		

3.4.5 SM-004 – CM App is in DEACTIVATING_APP status

CM App State Machine	
SM-004	
CM App is in DEACTIVATING_APP status	
Objective(s)	
To verify that CM app reaches DEACTIVATING_APP status after sending the deactivateServiceRequest message and before it receives the deactivateServiceConfirm message (positive or negative) or a timeout expires without receiving the activateServiceConfirm message.	
Pre-Conditions	
<ul style="list-style-type: none"> ○ Smartphone with Android version 4.4 ○ Communication manager is installed on smartphone ○ Following simulator are installed on smartphone: isitep_simulator, ISITEP_SecManager, isitep Preferences, isitep_phone ○ CM is in status ACTIVE_APP on Tetrapol App network (or Tetra App network) 	
Test procedure	
Action	Expected Result
1 From isitep simulator app uncheck the checkbox “Tetrapol Available” (or “Tetra Available”)	<ul style="list-style-type: none"> • Tetrapol App simulator (or Tetra App simulator) sends to CM App a networkAvailabilityIndication with following information: <ul style="list-style-type: none"> - serviceProviderName: Tetrapol (or Tetra) - Acknack: false • Without any further user action: CM app sends to Tetrapol App simulator (or Tetra App simulator) an deactivateServiceRequest with following information: <ul style="list-style-type: none"> - serviceProviderName: Tetrapol (or Tetra) - seqID: (one reported on text box in isitep_simulator)
2 Check on smartphone notification bar	It is shown following message: DEACTIVATING_APP cmStatus is now DEACTIVATING_APP
Comments	

3.5 Switching TETRA-TETRAPOL

3.5.1 AHO-001 – User sets on CM app Tetra as preferred network

Switching TETRA-TETRAPOL	
AHO-001	
User sets on CM app Tetra as preferred network	
Objective(s)	
To verify that if user sets on CM app properties Tetra network as preferred, the change is correctly accepted by app. Change will be active after a smartphone restart	
Pre-Conditions	
<ul style="list-style-type: none"> ○ Smartphone with Android version 4.4 ○ Communication manager is installed on smartphone ○ Following simulator are installed on smartphone: isitep_simulator, ISITEP_SecManager, isitep Preferences, isitep_phone ○ Tetrapol network is selected as preferred 	
Test procedure	
Action	Expected Result
1 Open Isitep Preferences	Tetrapol network is selected as preferred
2 Select Tetra network as preferred and click on "SAVE"	It is displayed message popup: "The values will be applied on next restart"
3 Restart smarthphone and open Isitep Preferences	Tetra network is now the preferred.
Comments	

3.5.2 AHO-002 – User sets on CM app Tetrapol as preferred network

Switching TETRA-TETRAPOL	
AHO-002	
User sets on CM app Tetrapol as preferred network	
Objective(s)	
To verify that if user sets on CM app properties Tetrapol network as preferred, the change is correctly accepted by app. Change will be active after a smartphone restart	
Pre-Conditions	
<ul style="list-style-type: none"> ○ Smartphone with Android version 4.4 ○ Communication manager is installed on smartphone ○ Following simulator are installed on smartphone: isitep_simulator, ISITEP_SecManager, isitep Preferences, isitep_phone ○ Tetra network is selected as preferred 	
Test procedure	
Action	Expected Result
1 Open Isitep Preferences	Tetra network is selected as preferred
2 Select Tetrapol network as preferred and click on "SAVE"	It is displayed message popup: "The values will be applied on next restart"
3 Restart smarthphone and open Isitep Preferences	Tetrapol network is now the preferred.
Comments	

3.5.3 AHO-003 – User sets on CM app the handover on Automatic

Switching TETRA-TETRAPOL	
AHO-003	
User sets on CM app the handover on Automatic	
Objective(s)	
To verify that if user sets on CM app properties the handover on automatic, the change is correctly accepted by app. Default operation mode is “Automatic”.	
Pre-Conditions	
<ul style="list-style-type: none"> ○ Smartphone with Android version 4.4 ○ Communication manager is installed on smartphone ○ Following simulator are installed on smartphone: isitep_simulator, ISITEP_SecManager, isitep Preferences, isitep_phone ○ Manual handover set previously (default operation mode is “Automatic”) 	
Test procedure	
Action	Expected Result
1 Open Isitep Preferences	“Manual Handover” check box is selected
2 Select “Automatic Handover” check box and click on “SAVE”	It is displayed message popup: “The values will be applied on next restart”
3 Restart smarthphone and open Isitep Preferences	“Automatic Handover” check box is now selected
Comments	

3.5.4 AHO-004 – Deregistration from preferred network if preferred network is not anymore available(activated app is the preferred). Automatic Handover

Switching TETRA-TETRAPOL	
AHO-004	
Deregistration of the preferred network (activated app is the preferred). Automatic Handover	
Objective(s)	
To verify that if CM is in ACTIVE_APP status and the activated app is the preferred one, with a triggering event of the deregistration of the preferred network modem: CM deactivates the preferred network app. If the configured handover is automatic but not preferred network modem is not registered CM does not execute any action;	
Pre-Conditions	
<ul style="list-style-type: none"> ○ Smartphone with Android version 4.4 ○ Communication manager is installed on smartphone ○ Following simulator are installed on smartphone: isitep_simulator, ISITEP_SecManager, isitep Preferences, isitep_phone ○ CM is in ACTIVE_APP on preferred network (Tetrapol or Tetra) ○ Not preferred network is not available (Tetra o Tetrapol) ○ Automatic Handover set 	
Test procedure	
Action	Expected Result
1 From isitep simulator app simulate the preferred network deregistration by unchecking the preferred network checkbox "Tetrapol Available" or "Tetra Available"	<ul style="list-style-type: none"> • Preferred network simulator sends to CM App a networkAvailabilityIndication with following information: <ul style="list-style-type: none"> - serviceProviderName: Preferred network simulator - Acknack: false • Without any further user action: CM app sends to Preferred network simulator an deactivateServiceRequest with following information: <ul style="list-style-type: none"> - serviceProviderName: Preferred network simulator - seqID: (one reported on text box in isitep_simulator) • After around 3 seconds Preferred network simulator sends to CM App a deactivateServiceConfirm with following information: <ul style="list-style-type: none"> - serviceProviderName: Preferred network simulator

		<ul style="list-style-type: none"> - Acknack: true - seqId: (one reported on text box in isitep_simulator)
2	Check on smartphone notification bar	It is shown following message: NOT_ACTIVE_APP cmStatus is now NOT_ACTIVE_APP
3	Open app isitep phone interface	<ul style="list-style-type: none"> • Added Value App sends a commServiceAvailRequest() to CM App • CM returns a commServiceAvailIndication no service is available • It will be display string: "No service available"
Comments		

3.5.5 AHO-004 – Registration on not preferred network if preferred network is not anymore available(activated app is the preferred). Automatic Handover

Switching TETRA-TETRAPOL	
AHO-004	
Registration on not preferred network if preferred network is not anymore available(activated app is the preferred). Automatic Handover	
Objective(s)	
To verify that if CM is in ACTIVE_APP status and the activated app is the preferred one, with a triggering event of the deregistration of the preferred network modem: CM deactivates the preferred network app. If not preferred network modem is registered and handover is automatic CM activates the not preferred app.	
Pre-Conditions	
<ul style="list-style-type: none"> ○ Smartphone with Android version 4.4 ○ Communication manager is installed on smartphone ○ Following simulator are installed on smartphone: isitep_simulator, ISITEP_SecManager, isitep Preferences, isitep_phone ○ CM is in ACTIVE_APP on preferred network (Tetrapol or Tetra) ○ Not preferred network is available (Tetra o Tetrapol) ○ Automatic Handover set 	
Test procedure	
Action	Expected Result
1 From isitep simulator app simulate the preferred network deregistration by unchecking the preferred network checkbox "Tetrapol Available" or "Tetra Available"	<ul style="list-style-type: none"> • Preferred network simulator sends to CM App a networkAvailabilityIndication with following information: <ul style="list-style-type: none"> - serviceProviderName: Preferred network simulator - Acknack: false • Without any further user action: CM app sends to Preferred network simulator an deactivateServiceRequest with following information: <ul style="list-style-type: none"> - serviceProviderName: Preferred network simulator - seqID: (one reported on text box in isitep_simulator) • After around 3 seconds Preferred network simulator sends to CM App a deactivateServiceConfirm with following information: <ul style="list-style-type: none"> - serviceProviderName: Preferred

		<p>network simulator</p> <ul style="list-style-type: none"> - Acknack: true - seqId: (one reported on text box in isitep_simulator) <ul style="list-style-type: none"> • After that the CM starts the procedure to activate the not preferred app: sends to not preferred network simulator an activateServiceRequest with following information: <ul style="list-style-type: none"> - serviceProviderName: Not Preferred Network - seqID: (one reported on text box in isitep_simulator) • After around 3 seconds Not Preferred network simulator sends to CM App a activateServiceConfirm with following information: <ul style="list-style-type: none"> - serviceProviderName: Not Preferred network simulator - Acknack: true - seqId: (one reported on text box in isitep_simulator)
2	Check on smartphone notification bar	It is shown following message: ACTIVE_APP cmStatus is now ACTIVE_APP
3	Open app isitep phone interface	<ul style="list-style-type: none"> • Added Value App sends a commServiceAvailRequest() to CM App • CM returns a commServiceAvailIndication not preferred network is available • It will be display string: "<No preferred network available"
Comments		

3.5.6 AHO-005 – Registration on the preferred network if preferred network is available (activated app is the not preferred). Automatic Handover

Switching TETRA-TETRAPOL	
AHO-004	
Deregistration of the preferred network (activated app is the not preferred). Automatic Handover	
Objective(s)	
To verify that if CM is in ACTIVE_APP status and the activated app is the not preferred one, with a triggering event of the registration of the preferred network modem: CM app deactivates the not preferred network app and to activate the preferred network app.	
Pre-Conditions	
<ul style="list-style-type: none"> ○ Smartphone with Android version 4.4 ○ Communication manager is installed on smartphone ○ Following simulator are installed on smartphone: isitep_simulator, ISITEP_SecManager, isitep Preferences, isitep_phone ○ CM is in ACTIVE_APP on preferred network (Tetrapol or Tetra) ○ Preferred network is not available (Tetra o Tetrapol) ○ Automatic Handover set 	
Test procedure	
Action	Expected Result
1 From isitep simulator app simulate the preferred network registration by checking the preferred network checkbox “Tetrapol Available” or “Tetra Available”	<ul style="list-style-type: none"> • Preferred App simulator sends to CM App a networkAvailabilityIndication with following information: <ul style="list-style-type: none"> - serviceProviderName: Preferred network - Acknack: true • Without any further user action: CM app sends to not preferred network simulator an deactivateServiceRequest with following information: <ul style="list-style-type: none"> - serviceProviderName: Not preferred network - seqID: (one reported on text box in isitep_simulator) • After around 3 seconds not preferred network simulator sends to CM App a deactivateServiceConfirm with following

		<p>information:</p> <ul style="list-style-type: none"> - serviceProviderName: Not preferred network - Acknack: true - seqId: (one reported on text box in isitep_simulator) <ul style="list-style-type: none"> • After that the CM starts the procedure to activate the preferred app: sends to preferred network simulator an activateServiceRequest with following information: <ul style="list-style-type: none"> - serviceProviderName: Preferred Network - seqID: (one reported on text box in isitep_simulator) • After around 3 seconds Preferred network simulator sends to CM App a activateServiceConfirm with following information: <ul style="list-style-type: none"> - serviceProviderName: Preferred network simulator - Acknack: true - seqId: (one reported on text box in isitep_simulator)
2	Check on smartphone notification bar	It is shown following message: ACTIVE_APP cmStatus is now ACTIVE_APP
3	Open app isitep phone interface	<ul style="list-style-type: none"> • Added Value App sends a commServiceAvailRequest() to CM App • CM returns a commServiceAvailIndication <preferred> app is available • It will be display string: "<preferred> PHONE GUI"
Comments		

3.5.7 AHO-006 – Deregistration from the not preferred network if not preferred network is not anymore available (activated app is the not preferred). Automatic Handover

Switching TETRA-TETRAPOL	
AHO-005	
Deregistration from the not preferred network if not preferred network is not anymore available (activated app is the not preferred). Automatic Handover	
Objective(s)	
To verify that: To verify that if CM is in ACTIVE_APP status and the activated app is the not preferred one, with a triggering event of the deregistration of the not preferred network modem: CM app deactivates the not preferred network app.	
Pre-Conditions	
<ul style="list-style-type: none"> ○ Smartphone with Android version 4.4 ○ Communication manager is installed on smartphone ○ Following simulator are installed on smartphone: isitep_simulator, ISITEP_SecManager, isitep Preferences, isitep_phone ○ CM is in ACTIVE_APP on not preferred network (Tetrapol or Tetra) ○ Preferred network is not available (Tetra o Tetrapol) ○ Automatic Handover set 	
Test procedure	
Action	Expected Result
1 From isitep simulator app simulate the not preferred network deregistration by unchecking the not preferred checkbox "Tetrapol Available" or "Tetra Available"	<ul style="list-style-type: none"> • Preferred App simulator sends to CM App a networkAvailabilityIndication with following information: <ul style="list-style-type: none"> - serviceProviderName: not Preferred network - Acknack: false • Without any further user action: CM app sends to not preferred network simulator an deactivateServiceRequest with following information: <ul style="list-style-type: none"> - serviceProviderName: Not preferred network - seqID: (one reported on text box in isitep_simulator) • After around 3 seconds not preferred network simulator sends to CM App a deactivateServiceConfirm with following information:

		<ul style="list-style-type: none"> - serviceProviderName: Not preferred network - Acknack: true - seqId: (one reported on text box in isitep_simulator)
	Check on smartphone notification bar	It is shown following message: NOT_ACTIVE_APP cmStatus is now NOT_ACTIVE_APP
	Open app isitep phone interface	<ul style="list-style-type: none"> • Added Value App sends a commServiceAvailRequest() to CM App • CM returns a commServiceAvailIndication No service is available • It will be display string: "No service is available"
Comments		

3.5.8 AHO-007 – User set on CM app the handover on Manual

Switching TETRA-TETRAPOL	
AHO-006	
User set on CM app the handover on Manual	
Objective(s)	
To verify that if user sets on CM app properties the handover on manual, the change is correctly accepted by app. Default operation mode is “Automatic”.	
Pre-Conditions	
<ul style="list-style-type: none"> ○ Smartphone with Android version 4.4 ○ Communication manager is installed on smartphone ○ Following simulator are installed on smartphone: isitep_simulator, ISITEP_SecManager, isitep Preferences, isitep_phone ○ Automatic handover set (as default once started smartphone). 	
Test procedure	
Action	Expected Result
1 Open Isitep Preferences	“Automatic Handover” check box is selected
2 Select “Manual Handover” check box and click on “SAVE”	It is displayed message popup: “The values will be applied on next restart”
3 Restart smarthphone and open Isitep Preferences	“Manual Handover” check box is now selected
Comments	

3.5.9 AHO-008 – Deregistration of the preferred network (activated network app is the preferred one). Manual Handover

Switching TETRA-TETRAPOL	
AHO-007	
Deregistration of the preferred network (activated network app is the preferred one). Manual Handover	
Objective(s)	
To verify that: To verify that if CM is in ACTIVE_APP status and the activated app is the preferred one, with a triggering event of the deregistration of the preferred network modem: CM app deactivates the preferred network app.	
Pre-Conditions	
<ul style="list-style-type: none"> ○ Smartphone with Android version 4.4 ○ Communication manager is installed on smartphone ○ Following simulator are installed on smartphone: isitep_simulator, ISITEP_SecManager, isitep Preferences, isitep_phone ○ CM is in ACTIVE_APP on not preferred network (Tetrapol or Tetra) ○ Manual Handover set 	
Test procedure	
Action	Expected Result
1 From isitep simulator app simulate the preferred network deregistration by unchecking the preferred network checkbox "Tetrapol Available" or "Tetra Available"	<ul style="list-style-type: none"> • Preferred App simulator sends to CM App a networkAvailabilityIndication with following information: <ul style="list-style-type: none"> - serviceProviderName: Preferred network - Acknack: false • Without any further user action: CM app sends to not preferred network simulator an deactivateServiceRequest with following information: <ul style="list-style-type: none"> - serviceProviderName: preferred network - seqID: (one reported on text box in isitep_simulator) • After around 3 seconds not preferred network simulator sends to CM App a deactivateServiceConfirm with following information: <ul style="list-style-type: none"> - serviceProviderName: preferred network

		<ul style="list-style-type: none"> - Acknack: true - seqId: (one reported on text box in isitep_simulator)
	Check on smartphone notification bar	It is shown following message: NOT_ACTIVE_APP cmStatus is now NOT_ACTIVE_APP
	Open app isitep phone interface	<ul style="list-style-type: none"> • Added Value App sends a commServiceAvailRequest() to CM App • CM returns a commServiceAvailIndication No service is available • It will be display string: "No service is available"
Comments		

3.5.10 AHO-009 – User can choose registration of the preferred network (activated network app is the not preferred one). Manual Handover

Switching TETRA-TETRAPOL	
AHO-008	
Deregistration of the not preferred network (activated network app is the not preferred one). Manual Handover	
Objective(s)	
To verify that: To verify that if CM is in ACTIVE_APP status and the activated app is the not preferred one, with a triggering event of the registration of the preferred network modem: User can decide to switch to preferred network and in this case CM app deactivates the not preferred network app and activates the preferred.	
Pre-Conditions	
<ul style="list-style-type: none"> ○ Smartphone with Android version 4.4 ○ Communication manager is installed on smartphone ○ Following simulator are installed on smartphone: isitep_simulator, ISITEP_SecManager, isitep Preferences, isitep_phone ○ CM is in ACTIVE_APP on not preferred network (Tetrapol or Tetra) ○ Manual Handover set 	
Test procedure	
Action	Expected Result
1 From isitep simulator app simulate the preferred network registration by checking the preferred network checkbox “Tetrapol Available” or “Tetra Available”	<ul style="list-style-type: none"> • Preferred App simulator sends to CM App a networkAvailabilityIndication with following information: <ul style="list-style-type: none"> - serviceProviderName: Preferred network - Acknack: true • It is shown a popup to user in order to choose to switch to preferred network. • If user accept to switch CM app sends to not preferred network simulator an deactivateServiceRequest with following information: <ul style="list-style-type: none"> - serviceProviderName: Not preferred network - seqID: (one reported on text box in isitep_simulator) • After around 3 seconds not preferred network simulator sends to CM App a deactivateServiceConfirm with following

		<p>information:</p> <ul style="list-style-type: none"> - serviceProviderName: Not preferred network - Acknack: true - seqId: (one reported on text box in isitep_simulator) <ul style="list-style-type: none"> • After that the CM starts the procedure to activate the preferred app: sends to preferred network simulator an activateServiceRequest with following information: <ul style="list-style-type: none"> - serviceProviderName: Preferred Network - seqID: (one reported on text box in isitep_simulator) • After around 3 seconds Preferred network simulator sends to CM App a activateServiceConfirm with following information: <ul style="list-style-type: none"> - serviceProviderName: Preferred network simulator - Acknack: true seqId: (one reported on text box in isitep_simulator)
	<p>Check on smartphone notification bar</p>	<p>It is shown following message: ACTIVE_APP cmStatus is now ACTIVE_APP</p>
	<p>Open app isitep phone interface</p>	<ul style="list-style-type: none"> • Added Value App sends a commServiceAvailRequest() to CM App • CM returns a commServiceAvailIndication No service is available • It will be display string: "<Preferred network PHONE GUI"
<p>Comments</p>		

3.5.11 AHO-010 – Activation of the preferred network (activated network app is the not preferred one). Manual Handover

Switching TETRA-TETRAPOL	
AHO-008	
Activation of the preferred network (activated network app is the not preferred one). Manual Handover	
Objective(s)	
To verify that: To verify that if CM is in ACTIVE_APP status and the activated app is not the preferred one, with a triggering event of the deregistration of the not preferred network modem: CM app activates the preferred network app.	
Pre-Conditions	
<ul style="list-style-type: none"> ○ Smartphone with Android version 4.4 ○ Communication manager is installed on smartphone ○ Following simulator are installed on smartphone: isitep_simulator, ISITEP_SecManager, isitep Preferences, isitep_phone ○ CM is in ACTIVE_APP on not preferred network (Tetrapol or Tetra) ○ Preferred network is available (see test cases AHO-008 if user refuse to switch to preferred) ○ Manual Handover set 	
Test procedure	
Action	Expected Result
1 From isitep simulator app simulate the not preferred network deregistration by unchecking the not preferred network checkbox “Tetrapol Available” or “Tetra Available”	<ul style="list-style-type: none"> • Not Preferred App simulator sends to CM App a networkAvailabilityIndication with following information: <ul style="list-style-type: none"> - serviceProviderName: Not Preferred network - Acknack: false • Without any further user action: CM app sends to not preferred network simulator an deactivateServiceRequest with following information: <ul style="list-style-type: none"> - serviceProviderName: not preferred network - seqID: (one reported on text box in isitep_simulator) • After around 3 seconds not preferred network simulator sends to CM App a deactivateServiceConfirm with following information: <ul style="list-style-type: none"> - serviceProviderName: not preferred

		<p>network</p> <ul style="list-style-type: none"> - Acknack: true - seqId: (one reported on text box in isitep_simulator) <ul style="list-style-type: none"> • After that the CM starts the procedure to activate the preferred app: sends to preferred network simulator an activateServiceRequest with following information: <ul style="list-style-type: none"> - serviceProviderName: Preferred Network - seqID: (one reported on text box in isitep_simulator) • After around 3 seconds Preferred network simulator sends to CM App a activateServiceConfirm with following information: <ul style="list-style-type: none"> - serviceProviderName: Preferred network simulator - Acknack: true - seqId: (one reported on text box in isitep_simulator)
	<p>Check on smartphone notification bar</p>	<p>It is shown following message: ACTIVE_APP cmStatus is now ACTIVE_APP</p>
	<p>Open app isitep phone interface</p>	<ul style="list-style-type: none"> • Added Value App sends a commServiceAvailRequest() to CM App • CM returns a commServiceAvailIndication No service is available • It will be display string: "<Preferred network PHONE GUI"
<p>Comments</p>		
<p> </p>		

3.6 Security manager Interface

3.6.1 ACM-001–CM Activation

Security manager Interface		
ACM-001		
CM Activation		
Objective(s)		
To verify that if on ISITEP HMI user executes a login on Security Manager and login successes: The security manager sends an ActivateCM to CM. CM is started in NOT_ACTIVE_APP status		
Pre-Conditions		
<ul style="list-style-type: none"> ○ Smartphone with Android version 4.4 ○ Communication manager is installed on smartphone ○ Following simulator are installed on smartphone: isitep_simulator, ISITEP_SecManager, isitep Preferences, isitep_phone ○ CM is in blocked status 		
Test procedure		
Action	Expected Result	
1	Check on smartphone notification bar	It is shown following message: BLOCKED cmStatus is now BLOCKED
2	Open security manager simulator app	App screen shows two button: block and unblock
3	Press unblock button	<ul style="list-style-type: none"> • Security Manager simulator sends a activateCM() to CM manager in order to unblock it. • CM returns to SM an ack and change its status in NOT_ACTIVE_APP
4	Check on smartphone notification bar	It is shown following message: NOT_ACTIVE_APP cmStatus is now NOT_ACTIVE_APP
Comments		

3.6.2 ACM-002–CM Deactivation

Security manager Interface	
ACM-002	
CM Deactivation	
Objective(s)	
To verify that if on ISITEP HMI user executes a logout on Security Manager: The security manager sends a DeactivateCM to CM. CM is stopped. Logout successes.	
Pre-Conditions	
<ul style="list-style-type: none"> ○ Smartphone with Android version 4.4 ○ Communication manager is installed on smartphone ○ Following simulator are installed on smartphone: isitep_simulator, ISITEP_SecManager, isitep Preferences, isitep_phone ○ CM is in ACTIVE_APP or ACTIVATING_APP or DEACTIVATING_APP or NOT_ACTIVE_APP status 	
Test procedure	
Action	Expected Result
1 Check on smartphone notification bar	It is shown following message: ACTIVE_APP (or ACTIVATING_APP or DEACTIVATING_APP or NOT_ACTIVE_APP) cmStatus is now ACTIVE_APP (or ACTIVATING_APP or DEACTIVATING_APP or NOT_ACTIVE_APP)
2 Open security manager simulator app	App screen shows two button: block and unblock
3 Press block button	<ul style="list-style-type: none"> • Security Manager simulator sends a deactivateCM() to CM manager in order to unblock it. • CM returns to SM an ack and change its status in BLOCKED
4 Check on smartphone notification bar	It is shown following message: BLOCKED cmStatus is now BLOCKED
Comments	
Xxx	

4. REQUIREMENT MAPPING

In this chapter all project requirements will be mapped over the test cases.

REQUIREMENT ID	TEST ID
REQ#1	IS-CM001, IS-CM002
REQ#2	CA-IF001, CA-IF002, CA-IF003, CA-IF004, AHO-002, AHO-003, AHO-004, AHO-005, AHO-007, AHO-008, AHO-009
REQ#3	CT-IF001, CT-IF002, CT-IF003, CT-IF004, CT-IF005, CT-IF006, CT-IF007, CT-IF008, CT-IF009, CT-IF010, CT-IF011, CT-IF012
REQ#4	CT-IF005, CT-IF009
REQ#5	CT-IF007, CT-IF011
REQ#6	CT-IF006, CT-IF008, CT-IF010, CT-IF012
REQ#7	CA-IF001, CA-IF002, CA-IF003, CA-IF004
REQ#8	Not anymore necessary cause of new microphone management from Selex application side.
REQ#9	AHO-003, AHO-008
REQ#10	AHO-001, AHO-002
REQ#11	AHO-003, AHO-004, AHO-005, AHO-006, AHO-007, AHO-008, AHO-009, AHO-010, AHO-011
REQ#11.1	AHO-006
REQ#11.2	AHO-004, AHO-005,
REQ#11.3	AHO-006
REQ#11.4	AHO-009, AHO-010, AHO-011
REQ#11.5	CA-IF004, AHO-006, AHO-008, AHO-009, AHO-010
REQ#11.6	AHO-010
REQ#11.7	AHO-011
REQ#12	AHO-003, AHO-004, AHO-005, AHO-006, AHO-007, AHO-008, AHO-009, AHO-010, AHO-011
REQ#13	AHO-004, CA-IF004
REQ#14	It will be checked during integration test (cifr. ISITEP_WP5.7.1_Enhanced terminal test report)
REQ#15	AHO-001, AHO-002, AHO-003, AHO-008

5. TEST REPORT

TEST ID	TEST TITLE	EXECUTION DATE	RESULT	BUG ID	NOTE
IS-CM001	CM installation procedure				
IS-CM002	CM service start				
CT-IF001	CM receives from TETRA networkAvailabilityIndication set to true				
CT-IF002	CM receives from TETRA networkAvailabilityIndication set to false				
CT-IF003	CM receives from TETRAPOL networkAvailabilityIndication set to true				
CT-IF004	CM receives from TETRAPOL networkAvailabilityIndication set to false				
CT-IF005	CM App sends an activateServiceRequest to TETRA App				
CT-IF006	TETRA App returns to CM App an activateServiceConfirm				
CT-IF007	CM App sends a deactivateServiceRequest to TETRA App				
CT-IF008	TETRA App returns to CM App an deactivateServiceConfirm				
CT-IF009	CM App sends an activateServiceRequest to TETRAPOL App				
CT-IF010	TETRAPOL App returns to CM App an activateServiceConfirm				
CT-IF011	CM App sends a deactivateServiceRequest to TETRAPOL App				
CT-IF012	TETRAPOL App returns to CM App an deactivateServiceConfirm				
CA-IF001	Added Value App sends a commServiceAvailRequest() to CM App				
CA-IF002	CM returns a commServiceAvailIndication TETRA App is available				
CA-IF003	CM returns a commServiceAvailIndication TETRA App is available				
CA-IF004	CM returns a commServiceAvailIndication No service is available				
SM-001	CM App in NOT_ACTIVE_APP status(app restart with no net available)				
SM-002	CM App in NOT_ACTIVE_APP status(after a deactivation)				
SM-003	CM App is in ACTIVATING_APP status				
SM-004	CM App is in ACTIVE_APP status				
SM-004	CM App is in DEACTIVATING_APP status				
AHO-001	User sets on CM app the handover on Automatic				
AHO-002	Deregistration from preferred network if preferred network is not anymore available(activated app is the preferred). Automatic Handover				
AHO-003	Registration on not preferred network if preferred network is not anymore available(activated app is the preferred).				

Automatic Handover

AHO-004	Registration on the preferred network if preferred network is available (activated app is the not preferred). Automatic Handover
AHO-005	Deregistration from the not preferred network if not preferred network is not anymore available (activated app is the not preferred). Automatic Handover
AHO-006	User set on CM app the handover on Manual
AHO-007	Deregistration of the preferred network (activated network app is the preferred one). Manual Handover
AHO-008	User can choose registration of the preferred network (activated network app is the not preferred one). Manual Handover
AHO-009	Activation of the preferred network (activated network app is the not preferred one). Manual Handover
ACM-001	CM Activation
ACM-002	CM Deactivation

6. ISSUE LIST

BUG ID	BUG DESCRIPTION	OPEN DATE	CLOSURE DATE	TEST ID	NOTE

7. REFERENCE

- [1] DOW_ISITEP__312484__20150220__A_B__downloaded_from_NEF
- [2] ISITEP_D5 2 2_V1 0

8. GLOSSARY

8.1 Abbreviations

For the purposes of the present document, the following abbreviations apply:

Acronym	Definition
3GPP	3rd Generation Partnership Project
ACM	Adaptation and Communication Manager
API	Application Programming Interface
App	Application
CM	Communication Manager
HMI	Human Machine Interface
MCC	Mobile Country Code
MNC	Mobile Network Code
MS	Mobile Station
MT	Mobile Terminal
PMR	Private / Professional Mobile Radio
PPDR	Public Protection and Disaster Relief
SDS	Short Data Service
SIM	Subscriber Identity Module
SSID	Service Set Identifier
TETRA	TERrestrial Trunked Radio
UE	User Equipment
WLAN	Wireless Local Area Network

9. VERSION HISTORY

Version	Date approved	Version history
0.0.1	08/02/2016	First version
0.2	18/02/2016	Second version
0.3	19/02/2016	Third version
0.4	02/03/2016	Fourth version
0.5	04/03/2016	Fifth version
0.6	08/03/2016	Sixth version

