



# Charging System (CS) 18

## Training Programs

Catalog of Course Descriptions



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## Introduction

Ericsson has developed a comprehensive Training Programs service to satisfy the competence needs of our customers, from exploring new business opportunities to expertise required for operating a network. The Training Programs service is delineated into packages that have been developed to offer clearly defined, yet flexible training to target system and technology areas. Each package is divided into flows, to target specific functional areas within your organization for optimal benefits.

Service delivery is supported using various delivery methods including:

Delivery Method

Instructor Led Training (ILT)

Web-based Learning (WBL)





# Charging Control Node (CCN) **Operations** for CS 18

LZU1082624 R1A

## Description:

The Charging Control Node (CCN) is a very relevant node in the Charging System solution. This course informs students about the role of the CCN, with access to the node, exercises and important explanations for who is interested to know, to configure and understand the CCN roles and functionalities. This course provides valuable information about the Charging Control Node (CCN) in the Charging System 18.

## Learning objectives:

On completion of this course the participants will be able to:

- 1 Describe the CCN Node and Environment
  - 1.1 Locate CCN in the CS 18 network
  - 1.2 Introduce the Node Management Toolbox Applications
  - 1.3 Describe the role of CCN Manager Application
  - 1.4 Describe the LDAP protocol
  - 1.5 List and explain supporting CPI documents
  - 1.6 Navigate the CCN Manager GUI
  - 1.7 Describe the data categories within CCN Manager
  - 1.8 Outline the CCN configuration Sequence
- 2 Configuration of the CCN Manager GUI data
  - 2.1 Explore CCN settings common to all services
  - 2.2 Explain access, service and function settings
  - 2.3 List parameters within the fields
- 3 Explain the configuration procedure of the CCN Node
  - 3.1 Outline the correct procedure for configuration
- 4 Discuss the CCN statistics
  - 4.1 Describe where statistics are obtained in CCN
  - 4.2 List the categories of statistical counters in CCN
  - 4.3 Recognize how statistical measurements are handled
  - 4.4 Describe how statistical files can be viewed
- 5 Manage the CCN Faults
  - 5.1 Identify the Alarm Interfaces: local alarm display, OSS, SNMP
  - 5.2 Examine the alarm database
  - 5.3 Monitor the error logging process
  - 5.4 Retrieve data to support troubleshooting



- 6 Discuss the CCN System administration
- 6.1 Examine the CCN hardware and software configuration on TSP
- 6.2 Navigate the Node Management GUI
- 6.3 Identify Maintenance Procedures

Target audience:

This course is suitable for anyone who is required be able to configure/operate/maintain Charging System (CS) 18

Prerequisites:

Successful completion of the following courses:

EPC System Survey - LZU1087977 or equivalent

TSP 7 Operation and Maintenance - LZU1089924 or equivalent

Charging Control Node (CCN) Overview for CS 18, LZU1082625

Duration and class size:

The length of the course is 2 days and the maximum number of participants is 8

Learning situation:

This course is based on theoretical and practical instructor-led lessons given in a technical environment using equipment and tools.



## Charging Control Node (CCN) Overview for CS 18

LZU1082625 R1A

### Description:

The Charging Control Node (CCN) is a very relevant node in the Charging System solution. This course informs students about the role of the CCN, presents the CCN network context including some selected traffic cases. It also introduces the CCN application for the CS 18 Solution.

### Learning objectives:

On completion of this course the participants will be able to:

- 1 List the main Functions and Architecture of the CCN in a CS 18 Solution
  - 1.1 Explain in overview why CCN was introduced into the Charging Network
  - 1.2 List and describe the functions of the CCN in CS 18
  - 1.3 Identify the hardware and software structure of CCN
  - 1.4 Locate the CCN in the Node Management Toolbox
  - 1.5 Introduce the CCN Manager GUI with the main tabs
- 2 Identify the Protocols and some Traffic Cases related to the CCN in the CS 18
  - 2.1 Describe the basic operations that comprise the CIP protocol
  - 2.2 Introduce the basic operations and parameters that comprise the CAP protocol
  - 2.3 Illustrate the Diameter SCAP protocol
  - 2.4 Describe MAP and Gx support
  - 2.5 Understand the functionality of Gy, Gx and Sy
- 3 List some of the statistics available for the CCN
  - 3.1 Explain the statistical counters available in CCN
  - 3.2 Give examples of the types of statistical counters available

### Target audience:

This course is suitable for anyone who is required to be familiar with Charging System (CS) 18



#### Prerequisites:

Successful completion of the following courses:

General knowledge of Charging System and TSP Platform are recommended. Preferably attended the courses TSP 7 Overview (LZU1089925) and Charging System (CS) 18 Overview (LZU1082627)

#### Duration and class size:

The length of the course is 1 day and the maximum number of participants per session is 16

#### Learning situation:

This course is based on theoretical instructor-led lessons given in a classroom environment.





# Charging System (CS) 18 AIR Rating Management

LZU1082626 R1A

## Description:

This course provides a clear understanding of the ways to be working with the Rating Management Application (RMA) in the AIR node for the Charging System (CS) 18. New features and functionalities of CS 18 refill is commented and the course is very beneficial to those who need to gain experience on AIR RMA for smartly configuring.

This course explores Voucher based and Voucher less Refill configurations and the concepts of account refill tree, value refill tree, premium refill tree, optional refill tree, promotion tree, account division tree, offline promotion and location aware refill tree. This course has a fine blend of theory and practical sessions to enrich participants with skills of working with AIR RMA for CS 18.

## Learning objectives:

On completion of this course the participants will be able to:

- 1 Explain the Account Information and Refill in Ericsson Charging System (CS) 18 and the Ericsson Rating Engine
  - 1.1 Describe the features and usage of the AIR RMA in CS 18
  - 1.2 Detail the RMA Selection Trees
  - 1.3 Discuss AIR Refill Services
  - 1.4 Underline the Refill Flow in AIR 4.0
  - 1.5 Detail the usage of common parameters in RMA
  - 1.6 Recognize simulation tests in RMA Selection Trees
- 2 Detail the configuration of Basic Account Refill tree
  - 2.1 Underline RMA concepts for AIR execution
  - 2.2 Illustrate Voucher based and Voucher less Refill configuration in trees
  - 2.3 Discuss the purpose and application of Account Refill tree
  - 2.4 Examine the conditions and modifiers in the Account Refill tree
  - 2.5 Illustrate how to provide a special bonus to a subscriber
  - 2.6 Configure an Account Refill Tree to provide special bonuses
- 3 Detail the configuration of Value Refill and Premium Refill trees
  - 3.1 List the purpose of Value Refill tree
  - 3.2 Underline Service Class Modifier
  - 3.3 Configure a Value Refill tree
  - 3.4 Describe the purpose of Premium Refill tree



- 3.5 Detail the configuration of Tree Jump Modifier
- 3.6 Configure a Premium Refill tree
- 4 Recognize the RMA configuration of Online Promotion and Offline Promotion trees
- 4.1 Underline the purpose of Promotion tree
- 4.2 Explain logic of conditions and modifiers in Promotion tree
- 4.3 Configure a Promotion tree
- 4.4 Underline the purpose of Offline Promotion tree
- 4.5 Demonstrate modifiers and conditions in Offline Promotion
- 5 Explain the RMA configuration of Account Division tree
- 5.1 Describe the purpose of Account Division tree
- 5.2 Discuss how to configure Dedicated Accounts with modifiers
- 5.3 Illustrate Timer Charging in AIR
- 5.4 Underline how DAs are used with Offer IDs
- 6 Illustrate the RMA configuration of Option Refill tree
- 6.1 List the purpose of Option Refill tree
- 6.2 Discuss the usage of modifiers and conditions
- 6.3 Detail an Option Refill tree
- 7 Recognize the RMA Configuration of Location Aware Refill tree
- 7.1 Explain the purpose of Location Aware Refill tree
- 7.2 Demonstrate the usage of the modifiers and conditions
- 7.3 Detail an Location Aware Refill Tree Configuration

Target audience:

This course is suitable for anyone who is required be able to configure/operate/maintain Charging System (CS) 18

Prerequisites:

Successful completion of the following courses:

Charging System (CS) 18 Overview (LZU1082627)



**Duration and class size:**

The length of the course is 2 days and the maximum number of participants is 8

**Learning situation:**

This course is based on theoretical and practical instructor-led lessons given in a technical environment using equipment and tools.





# Charging System (CS) 18 Overview

LZU1082627 R1A

## Description:

Operator staff who will use the Charging System must be aware of the possibilities and features of the system.

This course provides the participants with a general technical knowledge of the Ericsson Charging System (CS) 18. The course focuses on describing some of the features of Charging System (CS) 18, its architecture and how traffic cases are handled. It also focuses on the structure and function of this network with particular emphasis on all nodes involved and capabilities. The node platforms and interfaces are examined along with the service features. The course prepares students for further study on specific nodes and applications so that the Charging System can be utilized to its full potential

## Learning objectives:

On completion of this course the participants will be able to:

- 1 Explain the nodes that comprise the Charging System (CS) 18 network with particular emphasis on the CCN, SDP, AIR, ECMS, AF, VS and OCC functionality
  - 1.1 Describe the basic architecture and describe the functions of nodes in Charging System (CS) 18
  - 1.2 Explain the important interactions between the nodes of Charging System (CS) 18
  - 1.3 Describe some traffic case examples
- 2 Explain Subscription, Account and Service Levels in CS 18
  - 2.1 Understand subscription types and account types
  - 2.2 Explain the concept of Service Class and highlight its flexibility
  - 2.3 Describe the concept of Account Lifecycle and Service Levels
  - 2.4 Highlight account refills and adjustments
  - 2.5 Describe Charging Management using Selection Trees
  - 2.6 Explain modes of Subscriber Communication
- 3 Highlight new functionalities introduced in Charging System (CS) 18
  - 3.1 List the basic features of Charging System (CS) 18
  - 3.2 Highlight relevant use cases of new features in Charging System (CS) 18
- 4 Define the purpose of the Interfaces and Protocols used in CS 18 architecture
  - 4.1 List and describe the Charging System Integration Points such as charging interfaces, user communication interfaces, provisioning interfaces and historical data access interfaces



Target audience:

This course is suitable for anyone who is required to be familiar with Charging System (CS) 18

Prerequisites:

Successful completion of the following courses:

N A

Duration and class size:

The length of the course is 1 day and the maximum number of participants per session is 8

Learning situation:

This course is based on theoretical instructor-led lessons given in a classroom environment.



## Charging System (CS) 18 SDP Rating Management

LZU1082628 R1A

### Description:

Operators must charge their subscribers with clarity and transparency while ensuring there is no revenue leakage. Charging System has been imbued with new features and functionalities making the online charging process more flexible and customer centric. However this process is highly technical and complex.

This course focuses on Charging System 18 SDP Rating Management process and explores the use of dedicated accounts and usage accumulators, community charging, subscriber segmentation, personalized offer management, offer driven rating, advanced shared accounts, end-user notifications, dynamic service configurations, periodic account management and Yield Optimization.

This practical course teaches participants to configure, simulate and activate selection structures for realtime rating of all calls and sessions in the network.

### Learning objectives:

On completion of this course the participants will be able to:

- 1 Describe the features available in Charging System 18, demonstrate the Rating Management Application (RMA) and SDP Management Application (SMA) GUIs.
  - 1.1 Explain how to use the SDP Management Application and how to configure a Service Class.
  - 1.2 Explain how to use the Rule Management Application to create powerful and reliable rating structures.
  - 1.3 Explain features in Charging System 18.
- 2 Explain and configure the Dedicated Accounts, Selection and Bonus structures.
  - 2.1 Describe the purpose of Dedicated Account, Selection and Bonus structures.
  - 2.2 Illustrate how to activate Dedicated Accounts and Usage Accumulator at a Service Class level.
  - 2.3 Configure a structure to select one or multiple Dedicated Accounts
  - 2.4 Describe the meaning of Composite Dedicated Accounts and Multi Unit Type.
  - 2.5 Explain the concept of Negative Tariff on Dedicated Accounts.
  - 2.6 Configure a structure to select Usage Accumulators.
  - 2.7 Configure a structure to apply a Bonus on main account and/or on Dedicated Accounts.
- 3 Identify and configure selection trees based on Community Charging feature.
  - 3.1 List the main steps involved in setting up Community Charging.



- 3.2 Recognize the impact of Community Charging in the Network.
- 3.3 Explain the need for Number Normalization in Community Charging.
- 3.4 Recognize the impact of Community Charging on the other tree structures.
- 3.5 Demonstrate how to configure a Number Normalization tree and a Community Charging tree and how to use Community Charging in other tree structures.
- 4 Classify the Offer Management feature and demonstrate how it is implemented in selection trees.
  - 4.1 Explain the concept of Offer Management and demonstrate the different types of offer available in Charging System 18.
  - 4.2 Recognize the need for Usage Counters/Usage Thresholds and learn how to configure them in SMA/RMA.
  - 4.3 Understand the capabilities of the different offers; Account, Timer, MultiUserIdentification, ProviderAccount, SharedAccount.
  - 4.4 Create, edit and delete Offer Definitions on the SMA GUI.
  - 4.5 Identify the need for products and how they can further enhance the use of offers in CS 18.
  - 4.6 Discuss the use of Offer Attributes, and how they can simplify the editing of tariff plans.
  - 4.7 Describe the Offer Resource Connection function.
  - 4.8 Implement the use of Offer Management on the RMA structures to show end-to-end configuration.
- 5 Explain the Offer Driven Rating feature and construct the relevant trees using this feature.
  - 5.1 Understand the concept of Offer Driven Rating feature.
  - 5.2 Learn about the tariff switch functionality and how to enable/disable it.
  - 5.3 List the selection trees in implementing this feature.
  - 5.4 Explain and configure product associated DA.
  - 5.5 Create and execute Offer Driven Rating using SMA and RMA making use of DA selection tree, rating tree and UC/UT.
- 6 Recognize the impact of the Product Handling feature and learn how to configure it in both RMA & SMA GUIs.
  - 6.1 Recognize the impact of the Product Handling functionality.
  - 6.2 Explain the use of and differences between the Product Fee and ProductProvision trees.
  - 6.3 Become familiar with the concepts of Product Handling such as Base Offer, Depletable, Fee Capable etc.
  - 6.4 Describe the Auto-provisioning of products function and demonstrate how it is configured.
  - 6.5 Implement Product Handling use cases conveying the SMA & RMA configurations.
- 7 Classify the available USSD/SMS Notifications to the subscriber.
  - 7.1 Identify the USSD/SMS Notification capabilities.
  - 7.2 State when USSD/SMS Notifications can be sent.
  - 7.3 Recognize main conditions.
  - 7.4 Explain how to configure a USSD Text Message tree structure.





- 7.5 Explain how to specify if messages have to be sent as USSD or SMS.
- 8 Identify the policy control features and implement E2E use cases for various architectures.
  - 8.1 Describe the purpose of Policy Control and its impact on Charging System.
  - 8.2 Discuss Policy Control concepts, policy groups etc.
  - 8.3 Highlight the PolicyRuleDetermination tree and how it can be triggered.
  - 8.4 Examine the Esy, Sy and Gx interfaces used for Policy Control.
  - 8.5 Demonstrate the configuration of Policy Definitions on SMA.
  - 8.6 Recognize the impact of the PolicyRuleDetermination tree on RMA, and how to configure it for each interface, ESy, Sy and Gx.
  - 8.7 E2E traffic cases for Policy Management.
- 9 Explain and configure an Account Management structure.
  - 9.1 Understand the purpose of the Account Management Structure.
  - 9.2 Describe how to implement DA/UA Auto-Provisioning at Subscriber Installation and administration of DA/UA and offers at Service Class change.
  - 9.3 Configure a structure to charge for balance inquiries.
  - 9.4 Configure a structure to charge for subscriber initiated service class changes.
  - 9.5 Configure a structure to charge for subscriber initiated Family and Friends (FAF) administration.
  - 9.6 Configure a structure to charge for subscriber initiated Online ID Changes.
- 10 Recognize how Periodic Account Management (PAM) strengthens the advantage to manage all accounts in Charging System in the convergence scenario.
  - 10.1 Recognize how Periodic Account Management (PAM) strengthens the advantage to manage all accounts in Charging System in the convergence scenario.
  - 10.2 Recognize several use cases of PAM feature.
  - 10.3 Demonstrate how PAM is configured in both SMA and RMA.
  - 10.4 Create tree structures to implement Carry over using Composite DA, Time Limited and Amount Limited Carry over and Offer with PAM.
- 11 Demonstrate the Extended Statistics through the Statistics structure and Dynamic Service Configuration through the Service Detail Determination structure.
  - 11.1 Explain the advantage of using the Statistic Structure.
  - 11.2 Configuration of Statistic structure.
  - 11.3 Understand the Dynamic Service Configuration capability.
  - 11.4 Dynamic Service Configuration using the Service Detail Determination tree structure.
- 12 Explain the Business Configuration Consolidation and Distribution feature and how to use it
  - 12.1 Description of Business Configuration Consolidation(BCC) and Business Configuration Distribution (BCD).
  - 12.2 Examples of how Business Configuration Consolidation is used.
  - 12.3 Highlight and implement configuration examples.



- 13 Identify the benefits of Yield Optimization by configuring Rating Trees (Optional Chapter)
- 13.1 Describe Yield Optimization and understand the interaction with other functions, concepts and discount data.
- 13.2 Configuration of Yield Optimization in SMA.
- 13.3 Configuration of Yield Optimization in RMA.
- 13.4 Gain knowledge on common use cases.

Target audience:

This course is suitable for anyone who is required be able to configure/operate/maintain Charging System (CS) 18

Prerequisites:

Successful completion of the following courses:

Charging System (CS) 18 Overview, LZU1082627 R1A

Duration and class size:

The length of the course is 5 days and the maximum number of participants is 8

Learning situation:

This course is based on theoretical and practical instructor-led lessons given in a technical environment using equipment and tools.



## Charging System (CS) 18 System Administration

LZU1082629 R1A

### Description:

Operators must ensure that their Charging System (CS) 18 is running as efficiently as possible and that there is no network downtime.

The course covers routines to operate & maintain the Charging System (CS). The training is mainly focused on SDP server, VS Server and AIR server. The participants will be guided on the procedures to complete daily routine tasks on the servers to ensure the smooth running of the Charging System (CS). They will also learn the procedure to perform system monitoring, backup and recovery tasks and also get basic troubleshooting guidelines on the servers to deliver the best service possible to customers.

### Learning objectives:

On completion of this course the participants will be able to:

- 1 Describe the architecture of the CS network
  - 1.1 Identify the purpose of CS 18 and understand its architecture
  - 1.2 Underline the features of CS 18
  - 1.3 Explain some Interesting Call flows
- 2 Identify the hardware supported by the CS 18
  - 2.1 Describe the Hardware of SDP, AIR/AF and VS Nodes
  - 2.2 Determine the RAID concept
  - 2.3 Describe UFS Concept
  - 2.4 Identify the Hardware of the Nodes
  - 2.5 Underline Virtualization Platform Overview
- 3 Describe the FDS architecture and its importance in the CS 18
  - 3.1 Identify the meaning of FDS and its terminologies
  - 3.2 Define Component types and FDS Communication
  - 3.3 Describe Plug-ins and its states
  - 3.4 Identify the FDS process interaction
  - 3.5 Explain the various FDS tools
- 4 Describe the CS 18 interfaces and the Signaling Manager (SM)
  - 4.1 Identify the Signaling Manager in CS and its ways of working
  - 4.2 Determine the role of DIAMETER, DCCA and MSCC
  - 4.3 Describe the SCAPv2 signaling in CS



- 4.4 Explain Gy signaling in CS
- 4.5 List the impact of the Gx features
- 4.6 Determine the usage of ESy and 3GPP Sy for data charging in CS
- 4.7 Perform Service Configuration in CS
- 4.8 Underline Examples of Traffic Cases
- 5 Describe the purpose of Diameter Manager and its usage
- 5.1 Explain the purpose of Diameter Manager related to CIP and DCIP protocols
- 5.2 Describe the Stack configuration
- 5.3 Underline Route and Stack in Diameter Manager
- 6 Describe the SDP Architecture and perform System Admin, Monitoring and Maintenance Tasks
- 6.1 Explain SDP in overview level
- 6.2 Check the SDP external interfaces
- 6.3 List the software features in SDP
- 6.4 Check SDP directory structure
- 6.5 Explain SDP FDS Components and their functions
- 6.6 Underline the Geographical redundancy in SDP
- 6.7 Detail tasks on System Admin menu
- 6.8 Execute Administration jobs on SDP
- 6.9 Perform System Monitoring on SDP
- 6.10 Execute Backup and Recovery in SDP
- 6.11 Underline the Usage of the SDP Snapshot Tool
- 6.12 Perform daily, weekly and monthly maintenance tasks on SDP
- 7 Describe the VS (and NGVS) Architecture and perform System Admin, Monitoring and Maintenance Tasks
- 7.1 Detail the VS/NGVS in an Overview Level
- 7.2 Underline the VS/NGVS Software
- 7.3 Detail VS/NGVS Backup and Recovery
- 7.4 Explain VS/NGVS Maintenance
- 8 Describe the AIR Architecture and perform System Admin, Monitoring and Maintenance Tasks
- 8.1 Explain AIR Overview
- 8.2 Underline Administration functions
- 8.3 Cite examples of IVR Refill, USSD Refill and Batch Refill
- 8.4 Explain AIR software, FDS architecture and components
- 8.5 Underline the AIR directory structure
- 8.6 Explain the usage of AVIM
- 8.7 Determine the usage of batch files in AIR
- 8.8 Perform administration jobs on AIR
- 8.9 Explain System Monitoring jobs on AIR
- 8.10 Execute AIR Backup and Recovery
- 8.11 Perform daily, weekly and monthly maintenance tasks on AIR



- 9 Describe the Account Finder (AF)
- 9.1 Underline the AF in an overview level
- 9.2 Describe Traffic and Administrative Functions
- 9.3 Explain Standard and High capacity for AF
- 9.4 Describe the AF Interfaces
- 9.5 Underline the AF Redundancy
- 9.6 Explain the AF zone file
- 9.7 Underline the MSISDN prefix lookup

Target audience:

This course is suitable for anyone who is required be able to administer Charging System (CS) 18

Prerequisites:

Successful completion of the following courses:

Charging System (CS) 18 Overview (LZU1082627)

Duration and class size:

The length of the course is 5 days and the maximum number of participants is 8

Learning situation:

This course is based on theoretical and practical instructor-led lessons given in a technical environment using equipment and tools.





# Integrated Charging and **Catalog** Manager Workshop

LZU1082630 R1A

## Description:

Ericsson Catalog Manager (ECM), Ericsson Order Care (EOC) and Ericsson Charging System (CS) are important Ericsson solutions for Online and Offline Charging, including Hybrids subscribers. This course provides an introduction to ECM/EOC and CS components, highlighting parameters for the interconnection between the CS and ECM/EOC. It provides also an overview about nodes and components.

If you work at the Business Area for the CS, ECM, EOC and would like to improve your knowledge on the relations and parameters among those solutions, this course is for you.

## Learning objectives:

On completion of this course the participants will be able to:

- 1 Underline the Ericsson Catalog Manager (ECM)
  - 1.1 Describe the Ericsson Catalog Manager Architecture
  - 1.2 Clarify the Ericsson Catalog Manager components
- 2 Underline the Ericsson Order Care (EOC)
  - 2.1 Describe the Ericsson Order Care Architecture
  - 2.2 Clarify the Ericsson Order Care components
- 3 Explain the nodes that comprise the Charging System (CS) Solution, highlighting CCN, SDP, AIR, ECMS, AF, VS and OCC functionality
  - 3.1 Describe the Basic Architecture and Functions of Charging System nodes
  - 3.2 Explain interactions between Charging System nodes
  - 3.3 Describe some important Traffic Cases
- 4 Explain Subscription, Account and Service Levels in Charging System
  - 4.1 Understand subscription types and account types
  - 4.2 Explain the concept of Service Classes
  - 4.3 Describe the concept of Account Lifecycle and Service Levels
  - 4.4 Highlight account refills and adjustments
  - 4.5 Describe Charging Management using Selection Trees
- 5 List CS/EOC/ECM Interactions and Parameters
  - 5.1 Identify the CS Necessary Components for the integration with ECM
  - 5.2 Recognize the process to create a Product inside the ECM
  - 5.3 Explain the Product Operation Flow



Target audience:

This course is suitable for anyone who is required be able to configure/operate/maintain Charging System (CS) 18

Prerequisites:

Successful completion of the following courses:

EPC System Survey - LZU1087977 or equivalent

TSP 7 Operation and Maintenance - LZU1089924 or equivalent

Charging Control Node (CCN) Overview for CS 18, LZU1082625

Duration and class size:

The length of the course is 3 days and the maximum number of participants is 8

Learning situation:

This course is based on theoretical and practical instructor-led lessons given in a technical environment using equipment and tools.





# OCC Configuration and Surveillance for CS 18

LZU1082636 R1A

## Description:

Effectively utilizing Online Charging Control allows operators to introduce new services and revenue streams without delay. New and exciting business opportunities can be integrated into existing network infrastructure using the OCC node as a single point for charging data. This course introduces the fundamentals of Online Charging Control, where it sits in the network, the GUI, the configuration and surveillance of the OCC Component in terms of theory and practical.

## Learning objectives:

On completion of this course the participants will be able to:

- 1 Recognize the Online Charging Control concept
  - 1.1 Define the role of OCC
  - 1.2 Underline the Mediation concept compared to OCC
  - 1.3 Explain where OCC sits in the Charging network
  - 1.4 Identify Main Functionalities available with OCC
  - 1.5 List the differences between OCC and CCN
  - 1.6 Identify the OCC Traffic and Interfaces
  - 1.7 Describe the OCC Hardware
  - 1.8 Underline OCC Services
- 2 Explain the Functionality and Configuration supported by OCC
  - 2.1 Determine the OCC Architecture
  - 2.2 Illustrate the OCC GUI
  - 2.3 Recognize Alarms from GUI
  - 2.4 Underline the User handling from GUI
  - 2.5 Define the configuration frame
  - 2.6 Show logging, Tracing and Performance Monitoring
  - 2.7 Explain the Predefined Functions
  - 2.8 List the OCC traffic functions
- 3 Underline the OCC Service Configuration
  - 3.1 Identify the OCC Service Features
  - 3.2 Illustrate the DTR Service Configuration
  - 3.3 Recognize the Policy Control over Gx Configuration
  - 3.4 Explain the Policy Control over ESy Configuration



- 3.5 Discuss the Policy Control over Sy Configuration
- 3.6 Examine the SCAPV2 Configuration
- 3.7 Illustrate the VoLTE Configuration
- 4 Identify OCC System Administration tasks
  - 4.1 Examine OS User accounts
  - 4.2 Underline Application and 3PP components
  - 4.3 Navigate the OCC Directory Structure and System Directories
  - 4.4 Illustrate the location of Configuration Files and Log Files
  - 4.5 Discuss OCC Troubleshooting & Maintenance
  - 4.6 Illustrate the OCC License Management
- 5 List some OCC Enhancements for the Charging System in General
  - 5.1 Understand how OCC fits in with the Charging System 18
  - 5.2 Describe the OCC Enhancements for CS 18

Target audience:

This course is suitable for anyone who is required be able to configure/operate/maintain OCC in Charging System.

Prerequisites:

Successful completion of the following courses:

EPC System Survey - LZU1087977 or equivalent

TSP 7 Operation and Maintenance - LZU1089924 or equivalent

Charging Control Node (CCN) Overview for CS 18, LZU1082625

Duration and class size:

The length of the course is 2 days and the maximum number of participants is 8

Learning situation:

This course is based on theoretical and practical instructor-led lessons given in a technical environment using equipment and tools.