



# Charging System (CS) 18.1

## Training Programs

Catalog of Course Descriptions



# 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)





# Ericsson Charging Online Foundation

LZU1082795 R1A

## Description:

This online foundation course covers all the basic foundation knowledge required to work with Ericsson Charging. It aims to provide a holistic overview of the product from understanding basic concepts of Charging and its important nodes performing different online functions which enables the product to be the heart of BSS. This course highlights introduction, architecture, use cases as well as throws light on integrated policy and control capabilities. It also provides enhancements done on Catalog, OCC, Voucher Server and CRS. This prerequisite course will prepare you for the more deeper dive hands-on training on various nodes of Charging from the convenience of your location and time.

## Learning situation:

This is a Web-Based Learning.

This is a self-paced interactive learning with multimedia content, delivered online.

## Learning objectives:

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

- 1 Explain the basics of Ericsson Charging
  - 1.1 Get an introduction to the product
  - 1.2 Learn basic subscriber workflow
  - 1.3 Grasp various configuration around charging at high level
  - 1.4 Highlight technical architecture and features
  - 1.5 Learn advanced use cases
- 2 Describe NG-VS and its functions
  - 2.1 Introduce NG-VS
  - 2.2 Get to know the concept of cluster architecture
  - 2.3 Learn use cases in NG-VS
  - 2.4 Get to know updates done in NG-VS
- 3 Describe NG-CRS and its functions
  - 3.1 Introduce NG-CRS
  - 3.2 Learn NG-CRS architecture
  - 3.3 Learn how reporting is done in NG-CRS
  - 3.4 Spot the major updates done on CRS
- 4 Discuss the Ericsson Catalog Manager (ECM)
  - 4.1 Get to know the high-level workflow between Charging, Catalog and Order Care



- 4.2 Grab basics of Catalog and Order Care
- 4.3 Know ECM configuration
- 4.4 Realize how fast it is to implement ideas using these products
- 4.5 Follow some tutorial examples
- 4.6 Highlight enhancements done on ECM
- 5 Describe the Integrated Policy & Charging
- 5.1 Introduce Integrated Policy and Charging
- 5.2 Get to know the basics & background
- 5.3 Grasp the concepts of Integrated Policy and Charging
- 5.4 Experience Use Cases
- 5.5 Get to know enhancements done in OCC

**Target audience:**

This course is suitable for anyone who is required to be familiar with Ericsson Charging and needs to work with the product after attending other practical courses as part of the competence flow

**Prerequisites:**

Successful completion of the following courses:

This is an overview level of course and does not have any prerequisites

**Duration and class size:**

The length of the course is approximately 5 hours.



# Ericsson Charging Architecture and Features

LZU1082822 R1A

## Description:

Ericsson Charging is a Charging Solution from Ericsson composed by several nodes and features that assures the reliability, quality and performance in the network. This course brings an explanation about the Ericsson Charging Architecture and a description of some new Ericsson Charging Features and is intended for engineers/technicians that are familiar with the Charging System nodes. Hands on exercises for some new features using SMA and RMA are also presented in this training.

## Learning situation:

This is a Blended Learning.

The WBL component(s) is self-paced interactive learning with multimedia content, delivered online and the ILT component is based on theoretical and practical instructor-led lessons given in a technical environment using equipment and tools.

## Learning objectives:

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

- 1 Explain the Ericsson Charging Architecture and Nodes
  - 1.1 Introduce the Ericsson Charging Solution;
  - 1.2 Describe the Ericsson Charging Architecture;
- 2 Illustrate the Ericsson Charging Main Features
  - 2.1 Explain Global Parameters;
  - 2.2 Illustrate Offer Definition Version Handling;
  - 2.3 Explain Parameterized Quota Determination (Quota Management Solution);
  - 2.4 Detail Personalized Threshold Product Notification;
  - 2.5 Illustrate the Product Recurrence Schema;
  - 2.6 Explain Predefined Offer Values;
  - 2.7 Illustrate Trigger PAM on Successful Refill;
  - 2.8 Illustrate License Usage History GUI;
  - 2.9 Explain Other Improvements (Load Regulation), Immediate Delete of Contracts and Notifications to an External Notification Server

## Target audience:

Business Developer, System Administrator, Application Developer, Service Engineer, Service Deployment Engineer.



**Prerequisites:**

Successful completion of the following courses:

Ericsson Charging Online Foundation – LZU1082795 (WBL)

Ericsson Charging Rating Management – LZU 1082823 R1A (Blended course)  
or equivalent knowledge

**Duration and class size:**

The length of WBL component(s) is approximately 1 hour and 30 minutes.

The length of ILT component is 1 day and the maximum number of participants per session is 8.





# Ericsson Charging Rating Management

LZU1082823 R1A

## Description:

Operators must charge their subscribers with clarity and transparency while ensuring there is no revenue leakage. Ericsson Charging has included 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 Ericsson Charging, SDP & AIR Rating Management process, as well as Refill processes and Types, and explores the use resources and modifiers available in the RMA Application, illustrating the creations of tariffs and conditions associated to the subscriber's account and behavior, as well Offers configurations and other features associated.

This course teaches participants to configure, simulate and activate structures for Realtime rating of calls and sessions in the network and is composed by practical exercises to illustrate the theoretical lesson.

## Learning situation:

This is a Blended Learning.

The WBL component(s) is self-paced interactive learning with multimedia content, delivered online and the ILT component is based on theoretical and practical instructor-led lessons given in a technical environment using equipment and tools.

## Learning objectives:

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

- 1 Describe the Ericsson Charging, the SDP Management Application (SMA) and the Rating Management Application (RMA)
  - 1.1 Introduce the Ericsson Charging Solution;
  - 1.2 Illustrate how to use the SDP Management Application and how to configure a Service Class;
  - 1.3 Explain how to use the RMA (Rating/Rule Management Application) to create powerful and reliable rating structures;
- 2 Explain 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 Configure a structure to select Usage Accumulators.
- 2.6 Configure a structure to apply a Bonus on main account and/or on Dedicated Accounts.
- 3 Classify the Offer Management feature and demonstrate how it is implemented in selection trees.
  - 3.1 Explain the concept of Offer Management and demonstrate the different types of offer available in Ericsson Charging;
  - 3.2 Recognize the need for Usage Counters/Usage Thresholds and learn how to configure them in SMA/RMA;
  - 3.3 Underline the capabilities of the different offers;
  - 3.4 Create, edit and delete Offer Definitions on the SMA GUI;
  - 3.5 Identify the need for products and how they can further enhance the use of offers in Ericsson Charging;
  - 3.6 Explain the Offer Driven Rating feature;
  - 3.7 Create and execute Offer Driven Rating.
- 4 Recognize the impact of the Product Handling feature and learn how to configure it in both RMA & SMA GUIs
  - 4.1 Recognize the impact of the Product Handling functionality;
  - 4.2 Explain the use of and differences between the Product Fee and Product Provision;
  - 4.3 Describe the concepts of Product Handling such as; Base Offer, Depletable, Fee Capable etc.;
  - 4.4 Describe the Auto-Provisioning of products function and demonstrate how it is configured.
- 5 Classify the available USSD/SMS Notifications to the subscriber.
  - 5.1 Identify the USSD/SMS Notification capabilities.
  - 5.2 Explain how to configure a USSD Text Message tree structure.
- 6 Identify the Policy Control features
  - 6.1 Describe the purpose of Policy Control and its impact on Ericsson Charging.
  - 6.2 Examine the Esy, Sy and Gx interfaces used for Policy Control.
- 7 Explain and configure an Account Management structure.
  - 7.1 Understand the purpose of the Account Management Structure.
  - 7.2 Describe how to implement DA/UA Auto-Provisioning at Subscriber Installation and administration of DA/UA and offers at Service Class change.
- 8 Recognize the Periodic Account Management (PAM)
  - 8.1 Recognize how Periodic Account Management (PAM) strengthens the advantage to manage all accounts in Ericsson Charging in the convergence scenario.
- 9 Illustrate the Account and Information Refill (AIR) and Refill Services
  - 9.1 Explain RMA in AIR and illustrate an Overview about the AVIM
  - 9.2 Discuss various AIR Refill Services
  - 9.3 Describe the Refill Flow in AIR



- 10 Illustrate RMA Configuration of Basic Account Refill Tree
  - 10.1 Demonstrate Voucher-based and Voucher-less refill tree configuration
  - 10.2 Discuss the application of Account Refill Tree
  - 10.3 Configure an Account Refill Tree to provide special bonuses
  - 10.4 Illustrate RMA Configuration of Value Refill and Premium Refill Trees
- 11 Illustrate the RMA Configuration of Promotion
  - 11.1 Describe the purpose of Promotion Tree
  - 11.2 Illustrate the Offline Promotion
- 12 Describe the RMA Configurations of Account Division Tree
  - 12.1 Describe the purpose of Account Division Tree
  - 12.2 Discuss how to configure Dedicated Accounts with modifiers

**Target audience:**

Service Deployment Engineer, Business Developer

**Prerequisites:**

Successful completion of the following courses:

Ericsson Charging Online Foundation – LZU1082795 (WBL)

**Duration and class size:**

The length of WBL component(s) is approximately 3 hours.

The length of ILT component is 5 days and the maximum number of participants per session is 8.





# Ericsson Charging System Administration

LZU1082801 R1A

## Description:

Operators must ensure that their Ericsson Charging is running as efficiently as possible and that there is no network downtime.

The course covers routines to operate & maintain the Ericsson Charging. 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 get basic troubleshooting guidelines on the servers to deliver the best service possible to customers.

## Learning situation:

This is an Instructor-Led Training.

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

## Learning objectives:

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

- 1 Identify the hardware supported by the Ericsson Charging 18.1
  - 1.1 Describe the Hardware of SDP, AIR/AF and VS Nodes
  - 1.2 Determine the RAID concept
  - 1.3 Describe UFS Concept
  - 1.4 Identify the Hardware of the Nodes
  - 1.5 Underline Virtualization Platform Overview
- 2 Describe the FDS architecture and its importance in the Ericsson Charging 18.1
  - 2.1 Identify the meaning of FDS and its terminologies
  - 2.2 Define Component types and FDS Communication
  - 2.3 Describe Plug-ins and its states
  - 2.4 Identify the FDS process interaction
  - 2.5 Explain the various FDS tools
- 3 Describe the Ericsson Charging 18.1 interfaces and the Signaling Manager (SM)
  - 3.1 Identify the Signaling Manager in Ericsson Charging and its ways of working
  - 3.2 Determine the role of DIAMETER, DCCA and MSCC
  - 3.3 Describe the SCAPv2 signaling in Ericsson Charging
  - 3.4 Explain Gy signaling in Ericsson Charging

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- 3.5 List the impact of the Gx features
- 3.6 Determine the usage of ESy and 3GPP Sy for data charging in Ericsson Charging
- 3.7 Perform Service Configuration in Ericsson Charging
- 3.8 Underline Examples of Traffic Cases
  
- 4 Describe the purpose of Diameter Manager and its usage
  - 4.1 Explain the purpose of Diameter Manager related to CIP and DCIP protocols
  - 4.2 Describe the Stack configuration
  - 4.3 Underline Route and Stack in Diameter Manager
  
- 5 Describe the SDP Architecture and perform System Admin, Monitoring and Maintenance Tasks
  - 5.1 Explain SDP in overview level
  - 5.2 Check the SDP external interfaces
  - 5.3 List the software features in SDP
  - 5.4 Check SDP directory structure
  - 5.5 Explain SDP FDS Components and their functions
  - 5.6 Underline the Geographical redundancy in SDP
  - 5.7 Detail tasks on System Admin menu
  - 5.8 Execute Administration jobs on SDP
  - 5.9 Perform System Monitoring on SDP
  - 5.10 Execute Backup and Recovery in SDP
  - 5.11 Underline the Usage of the SDP Snapshot Tool
  - 5.12 Perform daily, weekly and monthly maintenance tasks on SDP
  
- 6 Describe the VS (and NGVS) Architecture and perform System Admin, Monitoring and Maintenance Tasks
  - 6.1 Detail the VS/NGVS in an Overview Level
  - 6.2 Underline the VS/NGVS Software
  - 6.3 Detail VS/NGVS Backup and Recovery
  - 6.4 Explain VS/NGVS Maintenance
  
- 7 Describe the AIR Architecture and perform System Admin, Monitoring and Maintenance Tasks
  - 7.1 Explain AIR Overview
  - 7.2 Underline Administration functions
  - 7.3 Cite examples of IVR Refill, USSD Refill and Batch Refill
  - 7.4 Explain AIR software, FDS architecture and components
  - 7.5 Underline the AIR directory structure
  - 7.6 Explain the usage of AVIM
  - 7.7 Determine the usage of batch files in administration jobs on AIR
  - 7.8 Explain System Monitoring jobs on AIR
  - 7.9 Execute AIR Backup and Recovery
  
- 8 Describe Account Finder and perform System Admin and Maintenance tasks
  - 8.1 Explain Standard and High capacity for AF



- 8.2 Underline the AF Redundancy
- 8.3 Explain the AF zone file
- 8.4 Underline the MSISDN prefix lookup
- 9 Describe the concept of Virtualization in Ericsson Charging
- 9.1 Explain administrative and maintenance operations
- 9.2 Describe common useful scenarios in Ericsson Charging
- 9.3 Describe Backup & Restore

**Target audience:**

This course is suitable for anyone who is required be able to administer Ericsson Charging nodes.

**Prerequisites:**

Successful completion of the following courses:

Ericsson Charging Online Foundation – LZU1082795 (WBL)

**Duration and class size:**

The length of the course is 4 days and the maximum number of participants per session is 8.







# vCCN Configuration and Operation

LZU1082824R1A

## 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 situation:

This is an Instructor-Led Training.

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

## 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

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- 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:**

Service Deployment Engineer, Business Developer

**Prerequisites:**

Successful completion of the following courses:

Charging System (CS) 18 Overview, LZU1082627 R1A

**Duration and class size:**

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



# 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.



# 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 Identity 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

**Prerequisites:**

Successful completion of the following courses:

EPC System Survey

Charging Control Node (CCN) Overview for CS 18.1 OR CS 18

**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.



# Next Generation Charging and Data Reporting System (NG CRS) Configuration and Administration

LZU1082440 R2A

## Description:

This course provides the participants with in depth technical knowledge of the Next Generation Charging and Data Reporting System (NG CRS). The practical course focuses on demonstrating the features of NG CRS, its architecture and how Usage and Account History and reporting tools are used. It also focuses on configuration, administration and troubleshooting various components in NG CRS.

The course prepares students for installation, administration and understanding of various features in NG CRS so that they can be utilized to its full potential.

## Learning situation:

This is an Instructor-Led Training.

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

## Learning objectives:

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

- 1 Explain CRS, CRS cluster setup and installation
- 2 Describe CDR flow and different modules used in CDR processing
- 3 Determine the need of number normalization and categorization in CRS
- 4 Explain UAHAPI service in CRS
- 5 Identify the use of data marts in CRS
- 6 Describe CLI and various O&M tasks in CRS
- 7 Explain CRS configuration management GUI
- 8 List the backup and restoration strategies in CRS
- 9 Review some more tools



**Target audience:**

This course is suitable for anyone who is required to understand the configuration and administration of NG CRS.

**Prerequisites:**

Successful completion of the following courses:

Next Generation Charging and Data Reporting System (NG CRS) Overview - LZU1082441

**Duration and class size:**

The length of the course is 4 days and the maximum number of participants is 8.