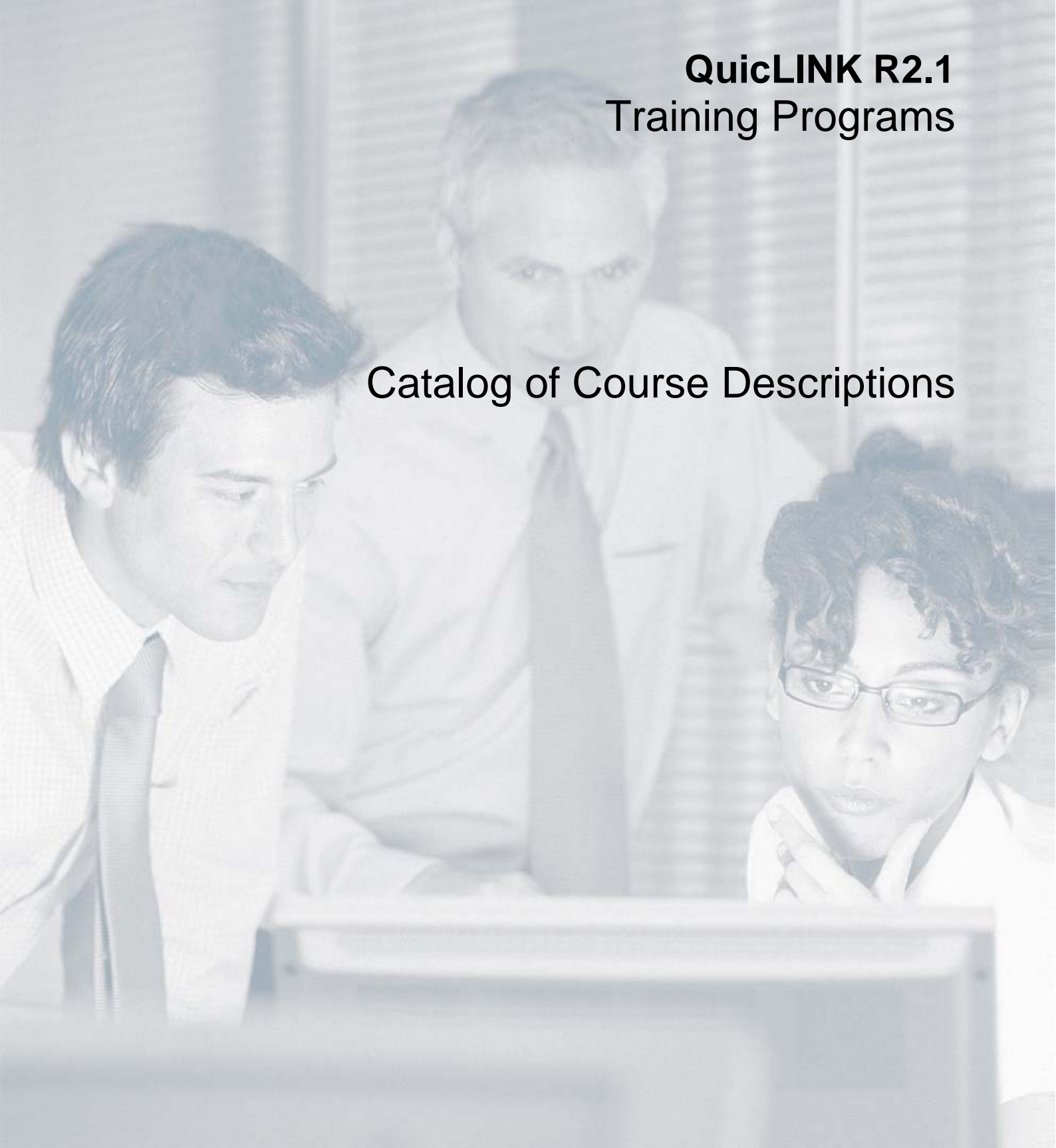




# QuicLINK R2.1 Training Programs

## 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:**

Icon	Delivery Method
	Instructor Led Training (ILT)
	Seminar (SEM)
	Workshop (WS)
	Virtual Classroom Training (VCT)
	Web Based Learning (WBL)
	Short Article (SA)
	Streaming Video (SV)
	CD-ROM (CD)
	Structured Knowledge Transfer (SKT)
<b>Delivery Enablers</b>	
	Remote Training Lab (RTL)
	Web Portal (WP)
<b>Ericsson Education E-Learning</b>	
	EEOnline @ <a href="http://learning.ericsson.net/eeonline/">http://learning.ericsson.net/eeonline/</a>

## QuicLINK R2.1 Introduction



LZU 108 7096 R1A

### Description

The QuicLINK R2.1 is completely transportable third generation (3G) network in a compact package. In other words this transportable compact box has the functions of all different WCDMA nodes and can provide a WCDMA services in areas where a regular communication infrastructure is absent or has broken down due to war, catastrophes or other urgent needs.

This theoretical course is applicable to everybody that needs a general understand and background about QuicLINK R2.1. It is a prerequisite for advanced QuicLINK R2.1 courses.

### Learning objectives

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

#### **1 State about QuicLINK R2.1 covering on different aspects**

- 1.1 Provide a general description about the structure and function of different nodes in a WCDMA network
- 1.2 Describe the QuicLINK R2.1 main functions
- 1.3 Describe the different possible application to QuicLINK R2.1
- 1.4 Identify the main principles behind the QuicLINK R2.1 implementation
- 1.5 State about the different QuicLINK R2.1 supported features

#### **2 Explain the Architecture and basic handling of QuicLINK R2.1**

- 2.1 Recognize the different components and connections in the QuicLINK R2.1 Architecture
- 2.2 Determine how to access QuicLINK R2.1 for configuration and O&M purpose
- 2.3 Explain the general procedure for QuicLINK R2.1 configuration
- 2.4 Explain general procedure for QuicLINK R2.1 Operation and Commissioning

#### **3 Determine the different possible user cases using QuicLINK R2.1**

- 3.1 Explain Intra-QuicLINK R2.1 Circuit-Switched UE to UE Call
- 3.2 Explain Inter-QuicLINK R2.1 Circuit-Switched UE to UE Call
- 3.3 Explain Intra-QuicLINK R2.1 Circuit-Switched UE to PSTN
- 3.4 Explain Inter-QuicLINK R2.1 Circuit-Switched UE to PSTN
- 3.5 Explain Packet Data Call using QuicLINK R2.1

**4 Demonstrate the QuicLINK R2.1 hardware and connections**

- 4.1 Explain the QuicLINK R2.1 hardware
- 4.2 Recognize the QuicLINK R2.1 internal configuration
- 4.3 Discriminate QuicLINK R2.1 external connections
- 4.4 Describe the QuicLINK R2.1 System Specification

**5 Describe the possible network operation modes for QuicLINK R2.1**

- 5.1 Explain the configuration in stand alone mode and in community
- 5.2 Explain the network behaviour when a new QuicLINK R2.1 joins the community
- 5.3 Describe how the HLR works in redundancy mode in the community
- 5.4 Explain the data synchronization in the community
- 5.5 Describe the different community operation cases

**Target audience**

This theoretical course is applicable to everybody that needs a general understand and background about QuicLINK R2.1.

The main target audience for this course are: System Technician, System Engineer and Field Technician

**Prerequisites**

There is no prerequisite to this course, but previous knowledge in WCDMA network is advisable.

**Duration and class size**

The duration of the course is 1 day and the maximum number of participants is 16.

**Learning situation**

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

## Time schedule

The time required always depends on the knowledge of the attending participants and the hours stated below can be used as estimate.

Day	Topics in the course	Estimated time
1	<ul style="list-style-type: none"><li>• State about QuicLINK R2.1 covering different aspects</li></ul>	1,5 h
1	<ul style="list-style-type: none"><li>• Explain the Architecture and basic handling of QuicLINK R2.1</li></ul>	0,5 h
1	<ul style="list-style-type: none"><li>• Determine the different possible user cases using QuicLINK R2.1</li></ul>	1,5 h
1	<ul style="list-style-type: none"><li>• Demonstrate the QuicLINK R2.1 hardware and connections</li></ul>	1,0 h
1	<ul style="list-style-type: none"><li>• Describe the possible network operation modes to the QuicLINK R2.1</li></ul>	1,5 h

## QuicLINK R2.1 Commissioning and Configuration



LZU 108 7097 R1A

### Description

The QuicLINK R2.1 is transportable compact equipment where all functions of the WCDMA network are implemented. In other words this small box has all the functions of different WCDMA nodes and can provide a WCDMA services in areas where communication infrastructure is absent or has broken down due to wars, catastrophes or other urgent needs.

This Practical course explains to the students the necessary procedures to commissioning and to configure the QuicLINK R2.1. After receive the factory configuration, the QuicLINK R2.1 must be configured in a staging area and the main purpose of this course is to provide the necessary information to perform this configuration at the Staging area. Operation and maintenance tests using Command Line Interface are also covered by this course.

### Learning objectives

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

#### 1 State about QuicLINK R2.1 covering different aspects


- 1.1 Describe the QuicLINK R2.1 main functions
- 1.2 Acknowledge the QuicLINK R2.1 possible configurations
- 1.3 Identify the main principles behind the QuicLINK R2.1 implementation
- 1.4 State about the different QuicLINK R2.1 supported features
- 1.5 Recognize the different components and connections in the QuicLINK R2.1 Architecture

#### 2 Determine the general procedures for the QuicLINK R2.1 configuration

- 2.1 Describe the different the QuicLINK R2.1 configuration Stages
- 2.2 Differentiate between the necessary configuration in each stage
- 2.3 Explain the factory configuration site
- 2.4 Determine the necessary configuration in the staging area
- 2.5 Identify field site operation and configuration
- 2.6 Differentiate between QuicLINK R2.1 operating in a Stand Alone mode and in a community.

#### 3 Demonstrate the necessary ability to provisioning a QuicLINK R2.1

- 3.1 Describe the different provisioning states
- 3.2 Determine the main functions and application to CLI (Command Line Interface)
- 3.3 Acknowledge different configuration files
- 3.4 Perform the QuicLINK R2.1 provisioning using the Master Configuration File (MCF), Dynamic Configuration File (DCF) and using a "ql\_subscriber.cfg" File

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- 4 Identify the CLI ( Command Line Interface ) and how to execute connection and communication with QuicLINK R2.1**
    - 4.1 Activate a local connection to the QuicLINK R2.1
    - 4.2 Obtain access to the QuicLINK R2.1 using the correct security procedures
    - 4.3 Discriminate the QuicLINK R2.1 COAM tasks
    - 4.4 Operate using the different CLI commands
    - 4.5 Perform the Main Screen Contents management
    - 4.6 Apply the Main Commands
    - 4.7 Differentiate between the commands categorized into several functional areas
  
  - 5 Demonstrate how to configure and operate a QuicLINK R2.1 community**
    - 5.1 Describe the QuicLINK R2.1 operation in community
    - 5.2 Determine the advantages in the community configuration
    - 5.3 Describe the implementation of the HLR working in Redundancy
    - 5.4 Explain the QuicLINK R2.1 System Synchronization
    - 5.5 Configure a QuicLINK R2.1 System in community
    - 5.6 Demonstrate use of different parameters
    - 5.7 Describe the different cases for community Operation
  
  - 6 Execute the different maintenance procedures for QuicLINK R2.1**
    - 6.1 Identify the different necessary tasks to O& M and re-provisioning
    - 6.2 Identify the different administration procedures
    - 6.3 Execute the graceful restart and graceful shut down
    - 6.4 Re-provisioning System Configuration
    - 6.5 Connect the CP to QuicLINK R2.1 and execute maintenance procedures using CLI
    - 6.6 Execute the different maintenance procedure for QuicLINK R2.1
  
  - 7 Describe Perform Fault Management and Configuration Management**
    - 7.1 Describe the COAM Subsystem structure and the different management areas
    - 7.2 Monitor alarms in QuicLINK R2.1 using CLI Interface
    - 7.3 Verify alarm history
    - 7.4 Describe the different tasks of the Fault Management Function
    - 7.5 Describe the alarms format
    - 7.6 Identify the “clear condition” for each alarm
    - 7.7 Describe Perform Fault Management and Configuration Management



### **Target audience**

This Practical course is applicable to the staff in charge of QuicLINK R2.1 configuration in the staging area. They are responsible for all configuration and O&M interaction using CLI Command Line Interface.

The main target audience for this course are: System Technician and System Engineer.

### **Prerequisites**

The prerequisite to this course is the course QuicLINK R2.1 Introduction LZU 108 7096. This course is part of the FAB 102 2215 QuicLINK R2.1 Introduction.

Previous knowledge in WCDMA is advisable.

### **Duration and class size**

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

### **Learning situation**

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



### Time schedule

The time required always depends on the knowledge of the attending participants and the hours stated below can be used as estimate.

Day	Topics in the course	Estimated time
1	<ul style="list-style-type: none"><li>• State about QuicLINK R2.1 covering different aspects</li></ul>	1,5 h
1	<ul style="list-style-type: none"><li>• Determine de general procedures for the QuicLINK R2.1 configuration</li></ul>	2,5 h
1 - 2	<ul style="list-style-type: none"><li>• Demonstrate the necessary ability to provisioning a QuicLINK R2.1</li></ul>	6 h
2	<ul style="list-style-type: none"><li>• Identify the CLI ( Command Line Interface ) and how to execute connection and communication with QuicLINK R2.1</li></ul>	2 h
3	<ul style="list-style-type: none"><li>• Demonstrate how to configure and operate a QuicLINK R2.1 community</li></ul>	2 h
3	<ul style="list-style-type: none"><li>• Execute the different maintenance procedures for QuicLINK R2.1</li></ul>	2 h
3	<ul style="list-style-type: none"><li>• Describe Perform Fault Management and Configuration Management</li></ul>	2 h

## QuicLINK R2.1 Field Operation



LZU 108 7098 R1A

### Description

The QuicLINK R2.1 is transportable compact equipment where all functions of the WCDMA network are implemented. In other words this small box has all the functions of different WCDMA nodes and can provide a WCDMA services in areas where communication infrastructure is absent or has broken down due to wars, catastrophes or other urgent needs.

This is a one day practical course to the staff in charge of field operation.

This course covers the necessary procedures to operate a pre-configured QuicLINK R2.1 in the field.

### Learning objectives

After complete this course the student will be capable to state about the following different areas and execute all necessary procedures to install and keep the QuicLINK R2.1 working in a field after the equipment leave the staging area. All operational procedures covered by this course are without the using PC and CLI.

After complete this course the student will be capable to:

#### 1 State about QuicLINK R2.1 covering different aspects

- 1.1 Describe the QuicLINK R2.1 main functions
- 1.2 Acknowledge the QuicLINK R2.1 possible configurations
- 1.3 Identify the main principles behind the QuicLINK R2.1 implementation
- 1.4 State about the different QuicLINK R2.1 supported features
- 1.5 Recognize the different components and connections in the QuicLINK R2.1 Architecture

#### 2 Demonstrate the QuicLINK R2.1 hardware and perform field installation and operation

- 2.1 Explain the QuicLINK R2.1 hardware
- 2.2 Recognize the QuicLINK R2.1 internal configuration
- 2.3 Discriminate QuicLINK R2.1 external connections
- 2.4 Describe the QuicLINK R2.1 system Specification
- 2.5 Perform QuicLINK R2.1 hardware installation, like in the field
- 2.6 Perform the main field operational procedures to QuicLINK R2.1

### **3 Determine the different checks scenarios that can be executed in a field in order to make sure that the QuicLINK R2.1 is working properly**

- 3.1 Perform QuicLINK R2.1 cable verification
- 3.2 Identify faults using QuicLINK R2.1 LED information
- 3.3 Identify operational state QuicLINK R2.1 LED information
- 3.4 Explain Intra- QuicLINK R2.1 Circuit-Switched UE to UE Call
- 3.5 Explain Inter- QuicLINK R2.1 Circuit-Switched UE to UE Call
- 3.6 Explain Intra- QuicLINK R2.1 Circuit-Switched UE to PSTN
- 3.7 Explain Inter- QuicLINK R2.1 Circuit-Switched UE to PSTN
- 3.8 Explain Packet Data Call using QuicLINK R2.1
- 3.9 Perform a test call for different possible scenarios
- 3.10 Execute QuicLINK R2.1 Operation and Maintenance Procedures
- 3.11 Perform QuicLINK R2.1 Field Maintenance

### **4 Describe the possible network operation modes to the QuicLINK R2.1**

- 4.1 Explain the configuration in standalone and in community modes
- 4.2 Describe the different community operation cases
- 4.3 Demonstrate the necessary actions for field operators in order to create a community
- 4.4 Demonstrate the necessary actions for field operators in order to connect a QuicLINK R2.1 in a PSTN
- 4.5 Demonstrate the necessary actions for field operators in order to connect a QuicLINK R2.1 in WLAN

#### **Target audience**

This practical course is applicable to everybody that are in charge to install a QuicLINK R2.1 in a field and a keep it working and providing coverage in a specific area.

The main target audience for this course are: System Technician, System Engineer and Field Technicians.

#### **Prerequisites**

The prerequisite to this course is the course QuicLINK R2.1 Introduction LZU 108 7096.

This course is part of the FAB 102 2215 QuicLINK R2.1 Introduction.

Previous knowledge in WCDMA is advisable.

#### **Duration and class size**

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

## Learning situation

This course is based on theoretical instructor-led lessons given in a classroom environment and practical exercises handling the QuicLINK R2.1 equipment.

## Time schedule

The time required always depends on the knowledge of the attending participants and the hours stated below can be used as estimate.

Day	Topics in the course	Estimated time
1	<ul style="list-style-type: none"><li>• State about QuicLINK R2.1 covering different aspects</li></ul>	1 h
1	<ul style="list-style-type: none"><li>• Demonstrate the QuicLINK R2.1 hardware and perform field installation and operation</li></ul>	2,5 h
1	<ul style="list-style-type: none"><li>• Determine the different checks scenarios that can be executed in a field in order to make sure that the QuicLINK R2.1 is working properly</li></ul>	1,5 h
1	<ul style="list-style-type: none"><li>• Describe the possible network operation modes to the QuicLINK R2.1.</li></ul>	1 h