Figure 47   **System state screen example for a Nokia FastMile 4G Receiver managed by an ACS through TR-069**

←   System State

LTE Cell Info

Connection state	true
Status	Attached.
Earfcn	1000
PCI	150

Current Signal Stats

RSRP	10
RSRQ	20
RSSI	30
SINR	40

**Other Stats**

Bytes Sent	101

Note — The Nokia Wireless app will display a value of "N/A" for parameters that are not supported by the installed Home 4G Receiver Software version.

The following additional Beam Angle information is displayed only for an ABA version as shown in Figure 48:

- Antenna mode: wide or narrow
- Horizontal angle: the horizontal angle is expressed as a degree if the Antenna mode is narrow or as N/A if the antenna mode is wide

Figure 48   **System state screen with Beam Angle information for a Nokia FastMile 4G Receiver managed by an ACS through TR-069**
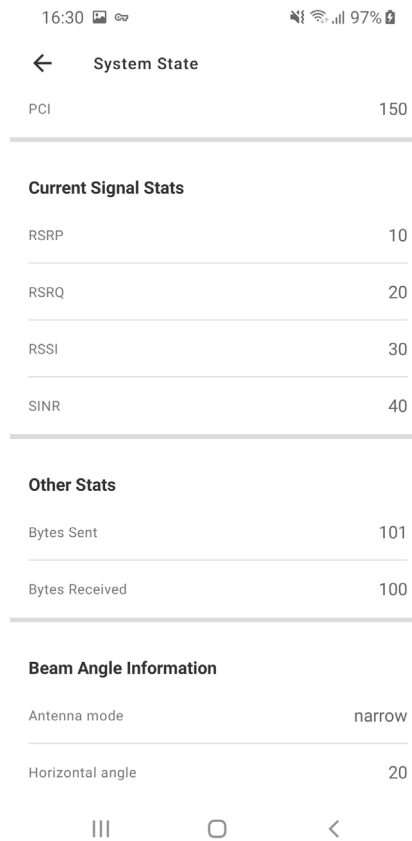
9 You can upload updated certificates (stored under downloads in the mobile phone's directory) to the Nokia FastMile 4G Receiver.

i Tap on the "Upload CA certificates" option, as shown in Figure 49.

Figure 49 **Screen that has the "Upload CA certificates" option for a Nokia FastMile 4G Receiver managed by an ACS through TR-069**
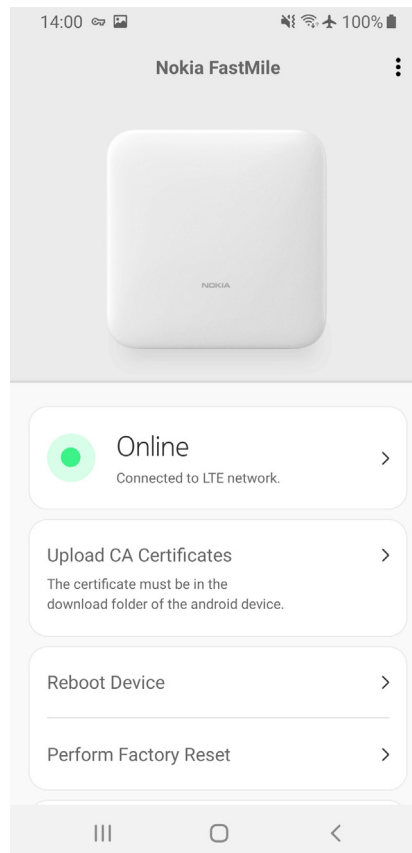
ii Tap on "Upload" on the Upload CA Certificates screen, as shown in Figure 50.

Figure 50   **Upload CA Certificates screen for a Nokia FastMile 4G Receiver managed by an ACS through TR-069**
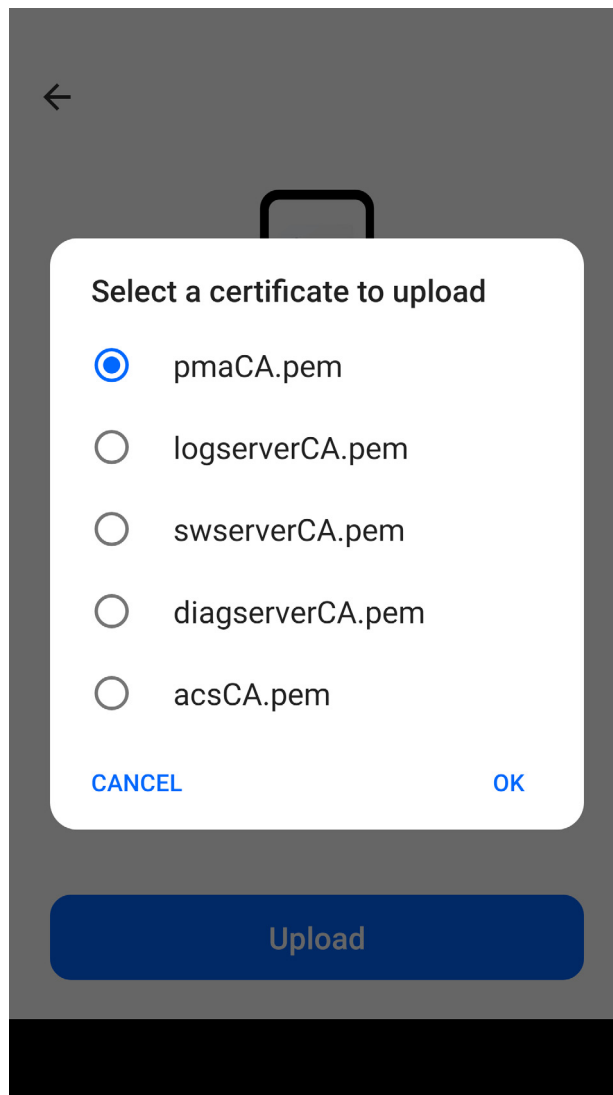

A list of CA certificates appears, as shown in Figure 51.

Figure 51　　　**List of CA certificates displayed on the Upload CA Certificates screen for a Nokia FastMile 4G Receiver managed by an ACS through TR-069**
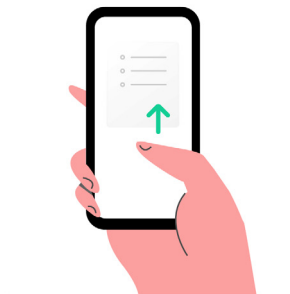

iii　　Select the required CA certificates and tap on "Ok". Note that the certificates must be in the download folder of the mobile phone before you can upload them to the Nokia FastMile 4G Receiver.

The following CA certificates are supported for a Nokia FastMile 4G Receiver Nokia FastMile 4G Receiver managed by an ACS:

- pmaCA.pem (used for authenticating the Nokia Altiplano FastMile Controller)
- logserverCA.pem (used for authenticating the log server)
- swserverCA.pem (used for authenticating the software upgrade server)
- diagserverCA.pem (used for authenticating the optional diagnostics server)
- acsCA.pem (used for authenticating the ACS)

iv The screen indicates when uploading of the CA certificates was successful, as shown in Figure 52.

Figure 52   **Screen showing that upload of CA certificates was successful for a Nokia FastMile 4G Receiver managed by an ACS through TR-069**
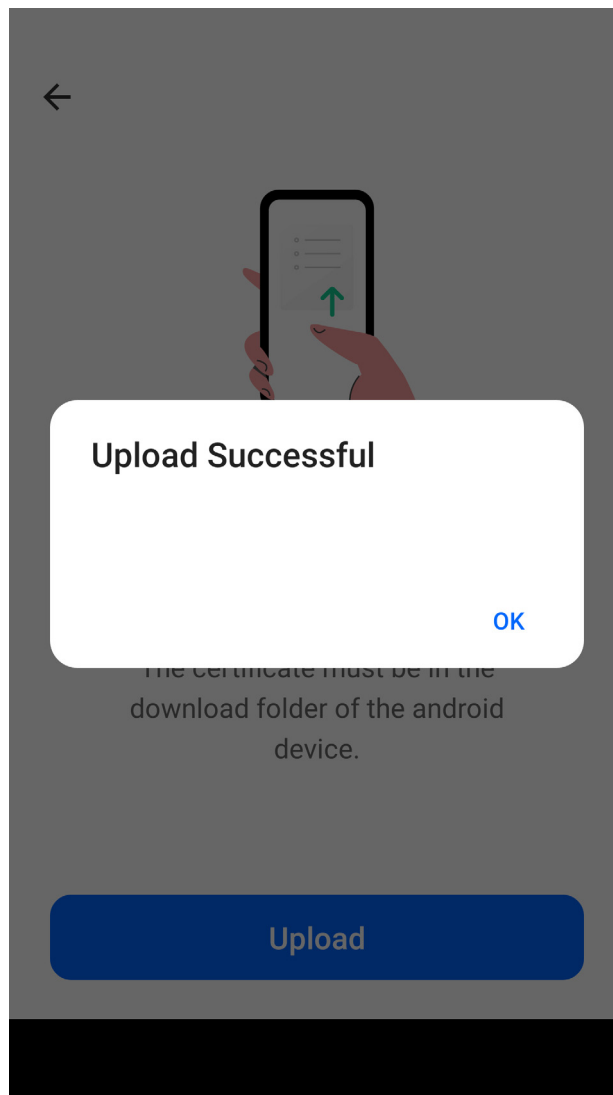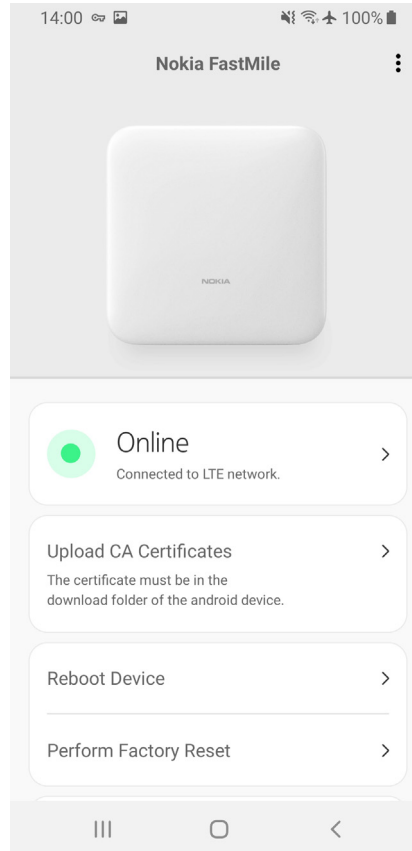

Tap on "Ok" to clear the message.

10   You can reboot a Nokia FastMile 4G Receiver managed by an ACS through TR-069 by tapping on the "Reboot Device" option.

Figure 53 shows the "Reboot Device" option.

Figure 53   **Screen showing the "Reboot Device" option for a Nokia FastMile 4G Receiver managed by an ACS through TR-069**

When you reboot the Nokia FastMile 4G Receiver, the screen shows the reboot message indicating that the Bluetooth connection will be interrupted and that you will be disconnected.
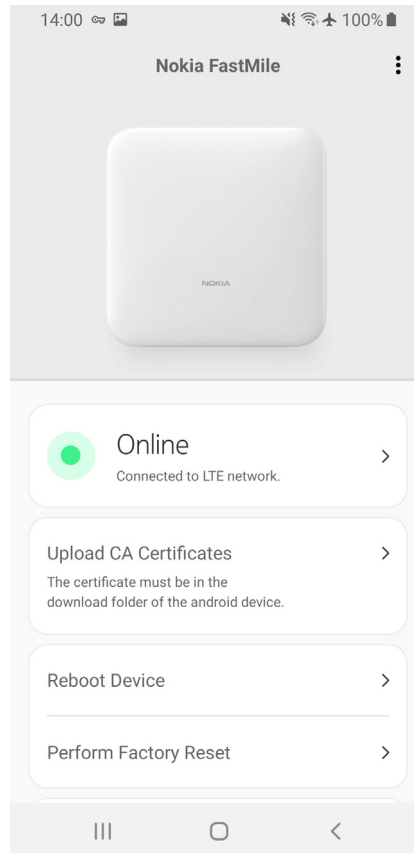
Press the Reboot option if you want to proceed with the reboot, or press the Cancel option.

If you pressed the Reboot option, press OK.

11   You can change the configuration settings for a Nokia FastMile 4G Receiver managed by an ACS through TR-069 to the default factory load settings by tapping on the "Perform Factory Reset" option.

Figure 54 shows the "Perform Factory Reset" option.

Figure 54   **Screen showing the "Perform Factory Reset" option for a Nokia FastMile 4G Receiver managed by ACS through TR-069**

The screen shows the factory reset message indicating that the factory reset will reset the device back to factory settings and that all changes will be lost and that you will be disconnected.

Figure 55 shows the screen that has the factory reset message.

Figure 55   **Screen showing the factory reset message for a Nokia FastMile 4G Receiver managed by ACS through TR-069**
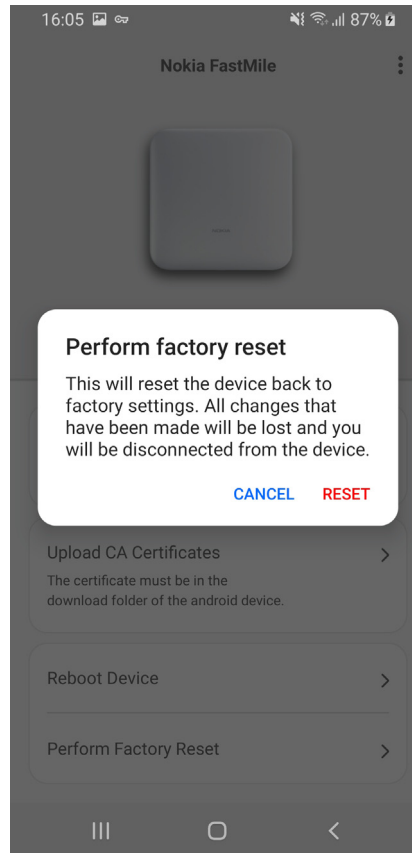
Press the Reset option if you want to proceed with the reset to factory settings, or press the Cancel option.

If you pressed the Reset option, press OK.

14   Management using the Web UI

14.1   Using the Web UI to manage the Nokia FastMile 4G Receiver

After the Nokia FastMile 4G Receiver has been installed, you can use the Web UI to perform some management-type activities on a Nokia FastMile 4G Receiver that is managed by an ACS through TR-069. See section 6.1.2 for more information about the Web UI.

The Web UI provides the following screens to provide support for management of the Nokia FastMile 4G Receiver:

- Status screen: allows viewing of FastMile 4G Receiver status parameter values, see section 14.2
- Network screen: allows configuration of specific FastMile 4G Receiver parameters (login is required), see section 14.3
- CBRS screen: offers the possibility to display CBSD parameters of the FastMile 4G Receiver, as well as to input registration information for CPI's usage (login is required), see section 14.4
- System screen: allows performing of advanced system actions (login is required), see section 14.5

14.2   Using the Web UI status screen

The Web UI status screen allows you to view FastMile 4G Receiver status parameters. No login is required.

The following parameters are shown:

- The Cell ID for primary attached cell
- The primary attached cell physical cell ID (PCI), eNodeB ID (eNBID), DL EARFCN and the Band

- The secondary attached cells physical cell ID (PCI) and DL EARFCN
- Secondary Component Carrier Band (Downlink)
- Secondary Component Carrier Band (Uplink)
- The Signal Strength of the attached cell: this animated model shows the RSRP (Reference Signals Received Power) of the attached cell
- The RSRP (Reference Signals Received Power) of the attached primary and secondary cells
- The RSRQ (Reference Signal Received Quality) of the attached primary and secondary cells
- The RSSI (Received Signal Strength Indication) of the attached primary and secondary cells
- The CINR (Carrier to Interference plus Noise Ratio) of the attached primary and secondary cells
- The SINR (Signal to Interference and Noise Ratio) of the attached primary cell
- Total number of MB sent on the LTE interface since last FastMile 4G Receiver restart
- Total number of MB received on the LTE interface since last FastMile 4G Receiver restart
- Total number of MB sent on the Ethernet interface since last FastMile 4G Receiver restart
- Total number of MB received on the Ethernet interface since last FastMile 4G Receiver restart
- Data Model (TR-069)
- Software Version
- Name and corresponding IP address of the configured Access Points
- Device Info table with information regarding the IMSI, IMEI, Ethernet MAC Address, Serial Number and the Model Name

You can display available cell information by triggering measurements using the "Trigger measurement" button on the Web UI status screen. Available cell information includes: physical cell ID, DL EARFCN, SINR, RSRP, RSRQ, RSSI. Note the following

- up to 12 available cells are shown, ranked from strongest to weakest by RSRP
- After approximately five seconds from triggering of measurements, the FastMile 4G Receiver will detach from the carrier's network. Push the measurements status refresh button while the FastMile 4G Receiver is detached to see the grayed-out Web UI status screen. Reattachment of the FastMile 4G Receiver may take from several seconds to up to five minutes. You will need to refresh the browser for updated Web UI status screen contents after reattachment of the FastMile 4G Receiver.
- available cell information will not be visible after rebooting the FastMile 4G Receiver

Figure 56 shows an example of the top part of the Status screen when the FastMile 4G Receiver is not connected to a cell.

Figure 56   **Example of the top part of the Status screen when the FastMile 4G Receiver is not connected to a cell**

Figure 57 shows the lower part after scrolling down of an example of the Status screen without available cells when the FastMile 4G Receiver is not connected to a cell.

Figure 57   **Example of the lower part of the Status screen without available cells when the FastMile 4G Receiver is not connected to a cell**
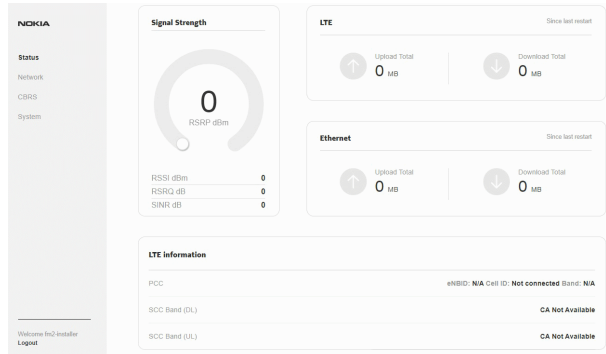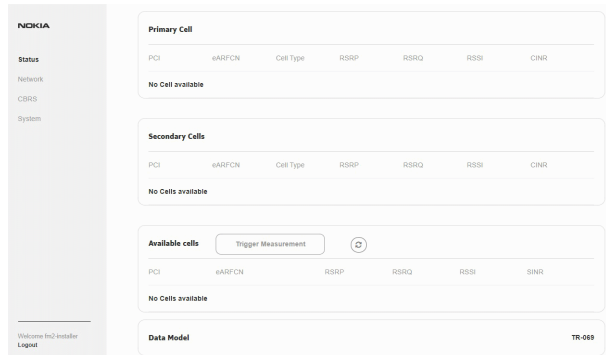

Figure 58 shows the lower part after scrolling down of an example of the Status screen with available cells when the FastMile 4G Receiver is not connected to a cell.

Figure 58   **Example of the lower part of the Status screen with available cells when the FastMile 4G Receiver is not connected to a cell**

Figure 59 shows the top part of an example of the Status screen when the FastMile 4G Receiver is connected to a cell.

Figure 59   **Example of the top part of the Status screen when the FastMile 4G Receiver is connected to a cell**


Figure 60 shows a lower part after scrolling down of an example of the Status screen when the FastMile 4G Receiver is connected to a cell. The figure shows the trigger measurement button that can be used to display information about available cells.

Figure 60   **Example of a lower part of the Status screen when the FastMile 4G Receiver is connected to a cell**
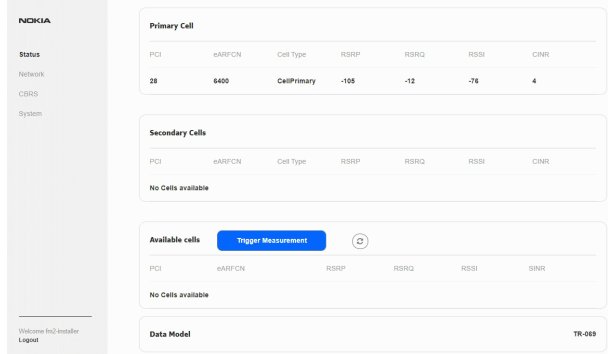
To display available cell information, select the trigger measurement button on the Status screen. Figure 61 shows the pop up window that appears when the trigger measurement button is selected.

Figure 61   **Example of the Trigger Measurement pop up window**
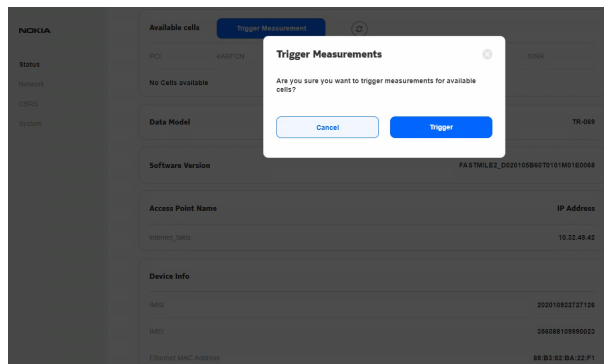
You can proceed or cancel the trigger measurement action.

Note — After approximately five seconds from triggering of measurements, the FastMile 4G Receiver will detach from the carrier's network. Push the measurements status refresh button while the FastMile 4G Receiver is detached to see the grayed-out Web UI status screen. Reattachment of the FastMile 4G Receiver may take from several seconds to up to five minutes. You will need to refresh the browser for updated Web UI status screen contents after reattachment of the FastMile 4G Receiver.

The following figures show examples of screens involved in the trigger measurement action:

- Figure 62 shows trigger measurement that is ongoing
- Figure 63 shows trigger measurement that has completed with a list of available cells and the FastMile 4G Receiver is detached from the carrier's network
- Figure 64 shows trigger measurement that has completed and the FastMile 4G Receiver is reattached to the carrier's network
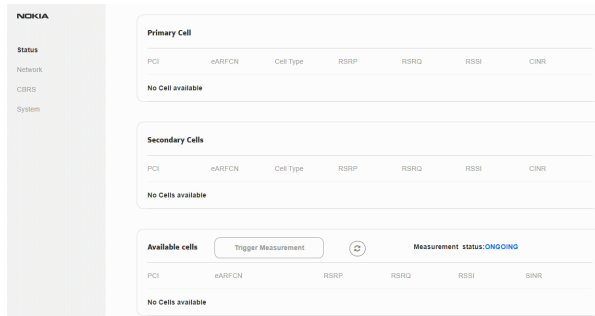
Figure 62 **Example of ongoing Trigger Measurement**

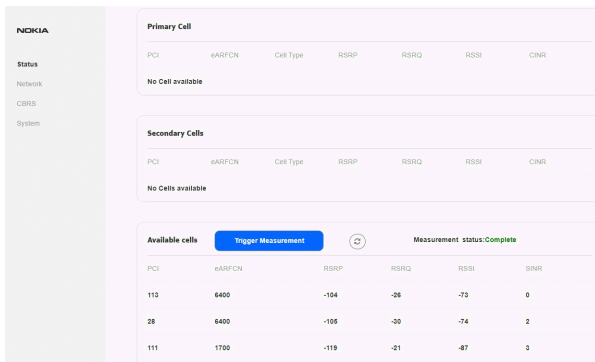*Figure 63* **Example of Trigger Measurement completed and FastMile 4G Receiver is detached**

Figure 64   **Example of Trigger Measurement completed and FastMile 4G Receiver is reattached**

Figure 65 shows the lowest part after scrolling down of an example of the Status screen when the FastMile 4G Receiver is connected to a cell.

Figure 65   **Example of the lowest part of the Status screen when the FastMile 4G Receiver is connected to a cell**

14.3   Using the Web UI network screen

The Web UI network screen allows you to perform FastMile4G Receiver configuration actions. Login is required. For details on the Web UI login, please refer to the Customer Release Notes.

The following configuration capabilities are supported:

- Configuration of ACS URL
- Configuration of ACS username
- Configuration of ACS password
- Configuration of Connection Request Port
- Configuration of Connection Request Username

- Configuration of Connection Request Password
- Configuration of Periodic Inform Interval
- Configuration of Periodic Inform Request
- Setting of location; that is, geocoordinates (latitude and longitude)
- Configuration of Access Points (up to one default AP in router mode and up to four APs in bridge mode; a total of five APs can be configured). AP configuration includes configuration of:
  - AP name
  - forwarding mode (router or bridge)
  - Username
  - Password
  - Authentication mode
  - VLAN
  - MTU size
  - subnet mask
  - Note that the default AP cannot be deleted
- Configuration of cell list (up to nine cells can be configured)
- Configuration of the DHCP server for router mode
- Uploading of CA certificates

Note — CA certificates must be pre-downloaded to the laptop so that they can be browsed and found via the 'Upload Certificate' action. The CA Certificates must comply to the naming rules required by the FastMile4G Receiver.

The following CA certificates are supported:

- logserverCA.pem (used for authenticating the log server)
- swserverCA.pem (used for authenticating the software upgrade server)
- diagserverCA.pem (used for authenticating the optional diagnostics server)
- acsCA.pem (used for authenticating the ACS)

Figure 66 shows an example of the Login screen.

Figure 66   **Example of the Login screen**
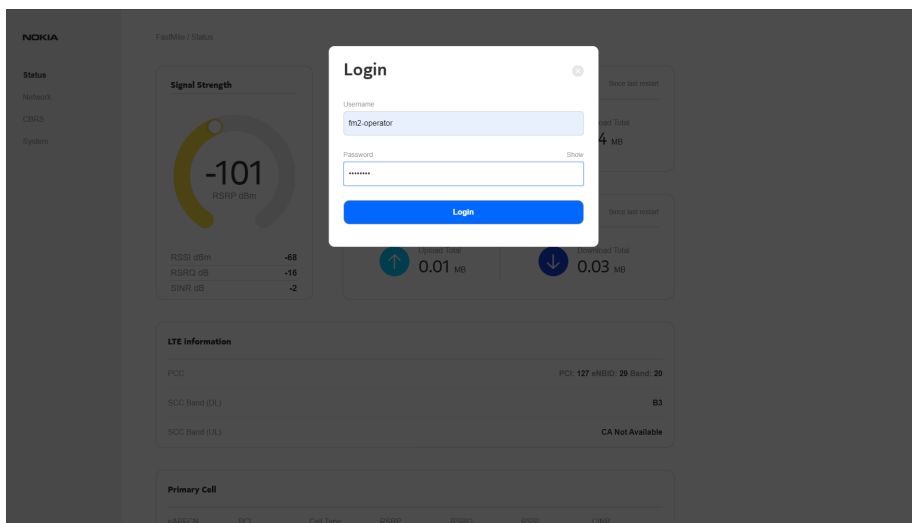
Figure 67 shows an example of the Network screen.

Figure 67   **Example of the Network screen**
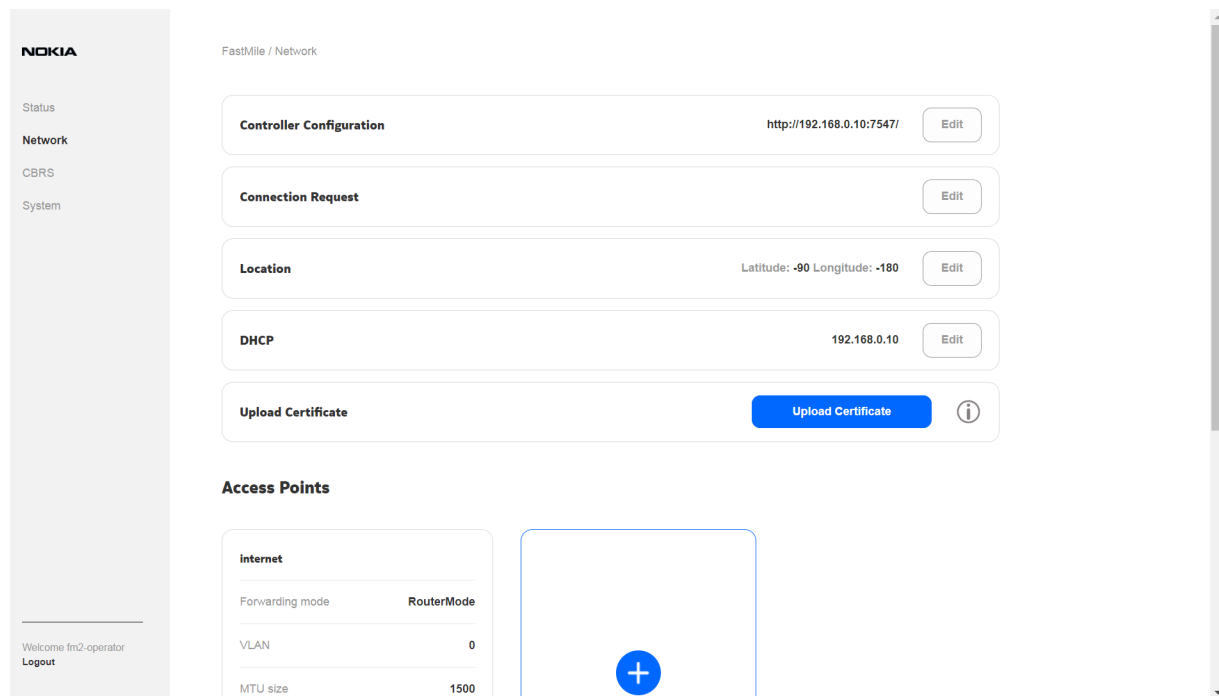
Figure 68 shows an example of scroll down for the Network screen.

Figure 68   **Example of scroll down for the Network screen**
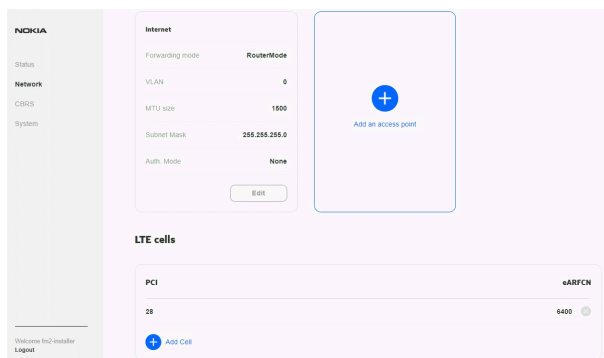
Figure 69 shows an example of the Add Access Point window.

Figure 69   **Example of the Add Access Point window**
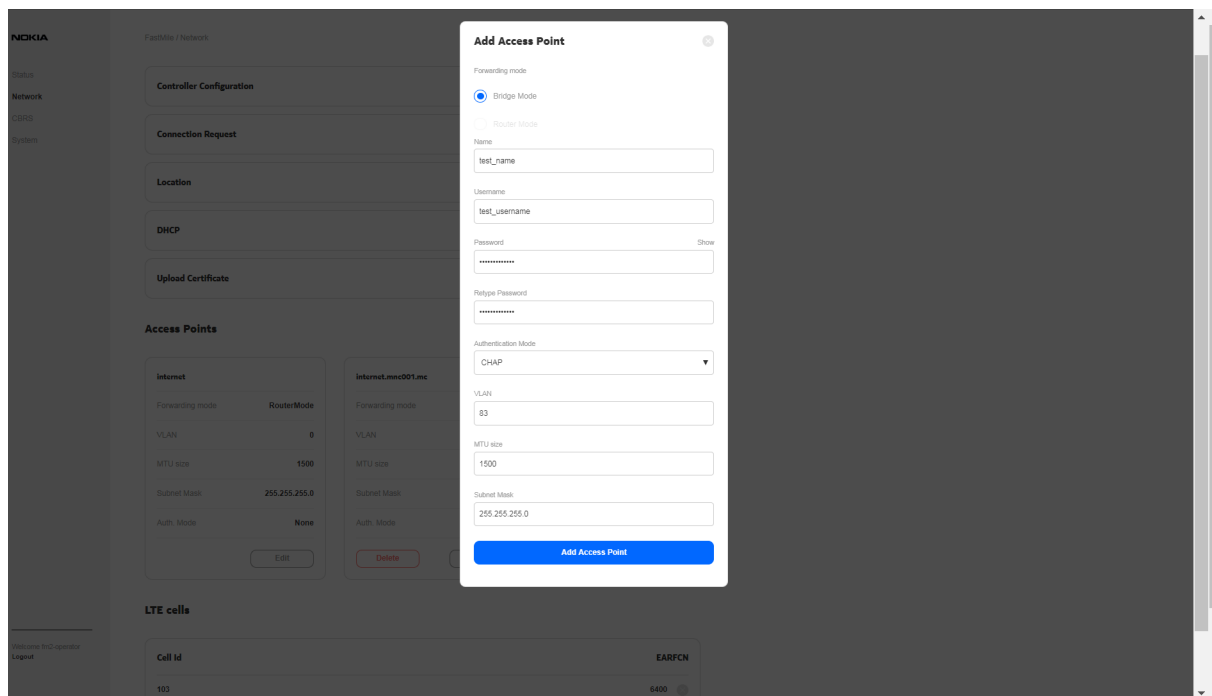
Figure 70 shows an example of the Delete Access Point window

Figure 70   **Example of the Delete Access Point window**
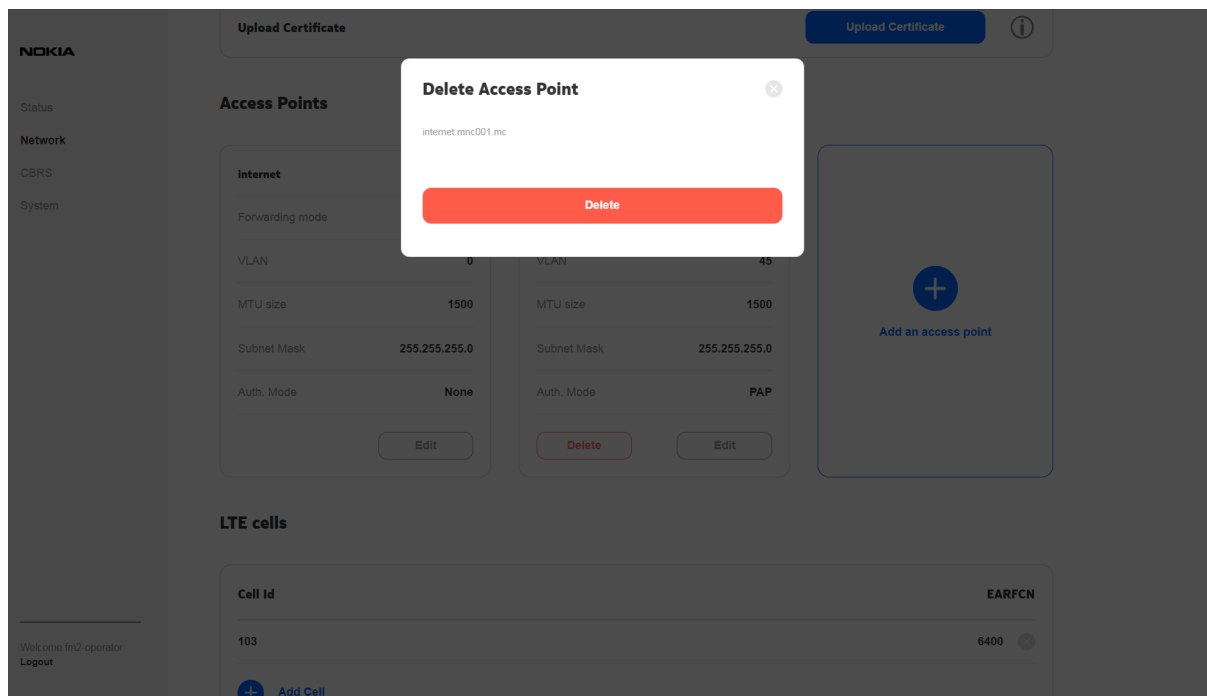
Figure 71 shows an example of the Edit Location window.

Figure 71   **Example of the Edit Location window**
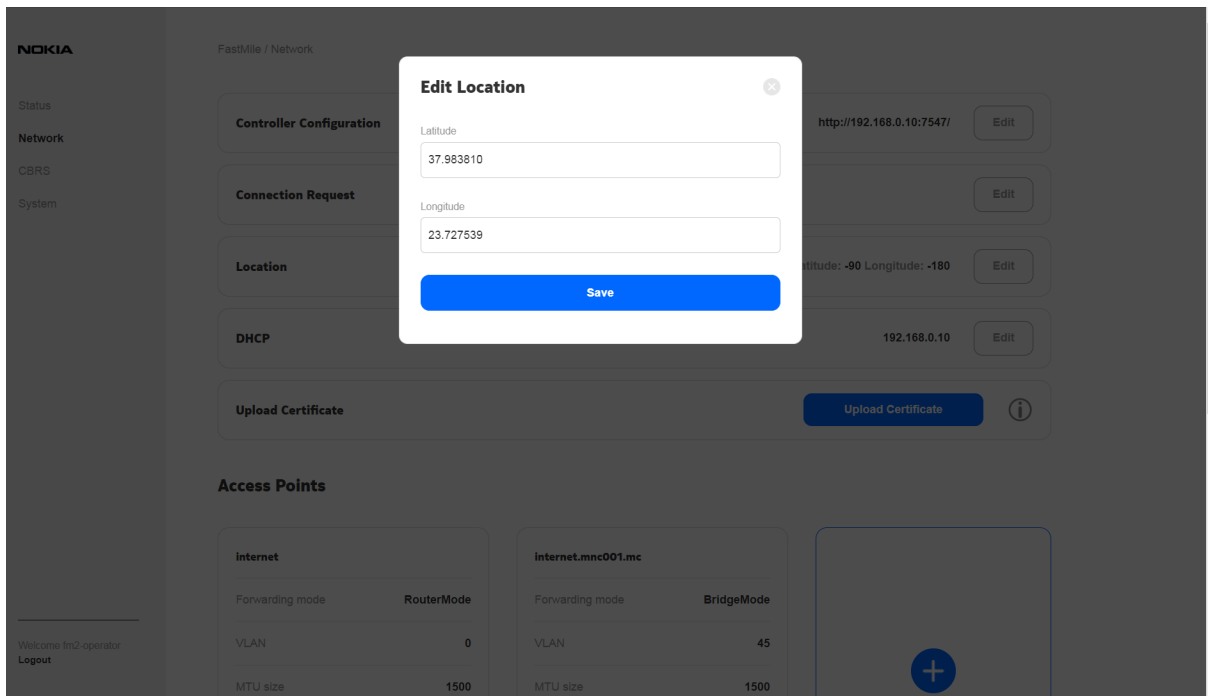
Figure 72 shows an example of the Edit Controller window.

Figure 72   **Example of the Edit Controller window**
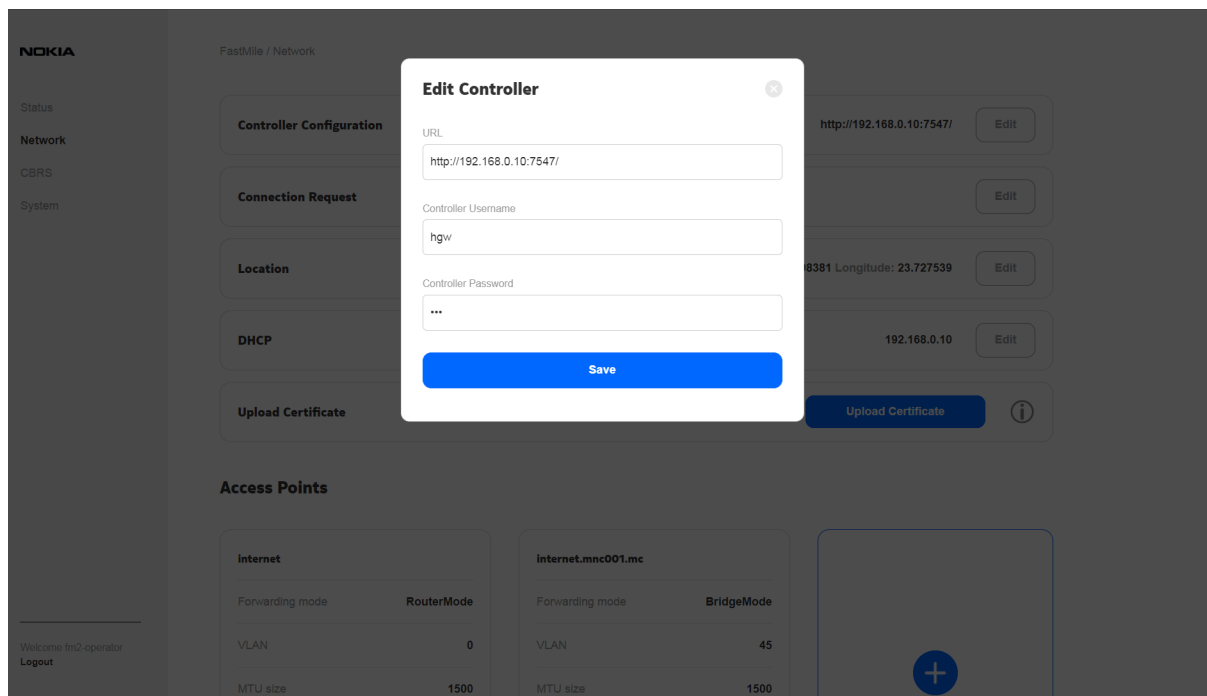
Figure 73 shows an example of the Edit Connection Request window.

Figure 73   **Example of the Edit Connection Request window**
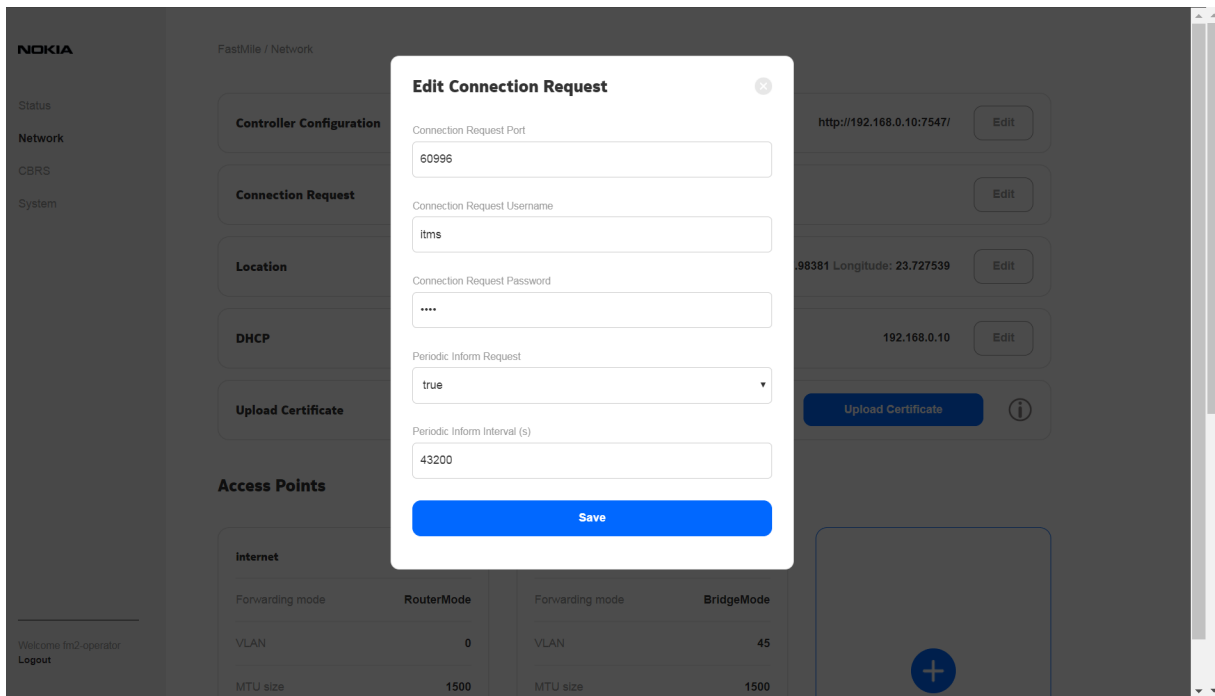
Figure 74 shows an example of the Edit DHCP window.

Figure 74   **Example of the Edit DHCP window**
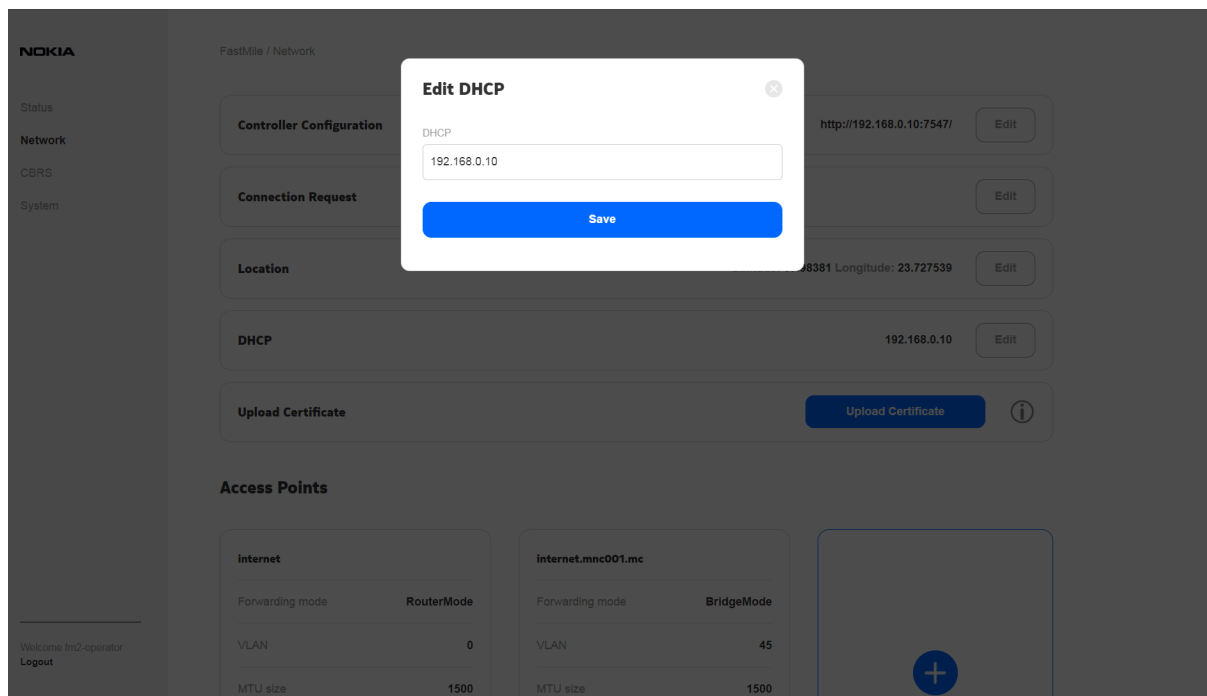
Figure 75 shows an example of the Certificates information window that opens when you click on Upload Certificate.

*Figure 75*   **Example of the Certificates information window**
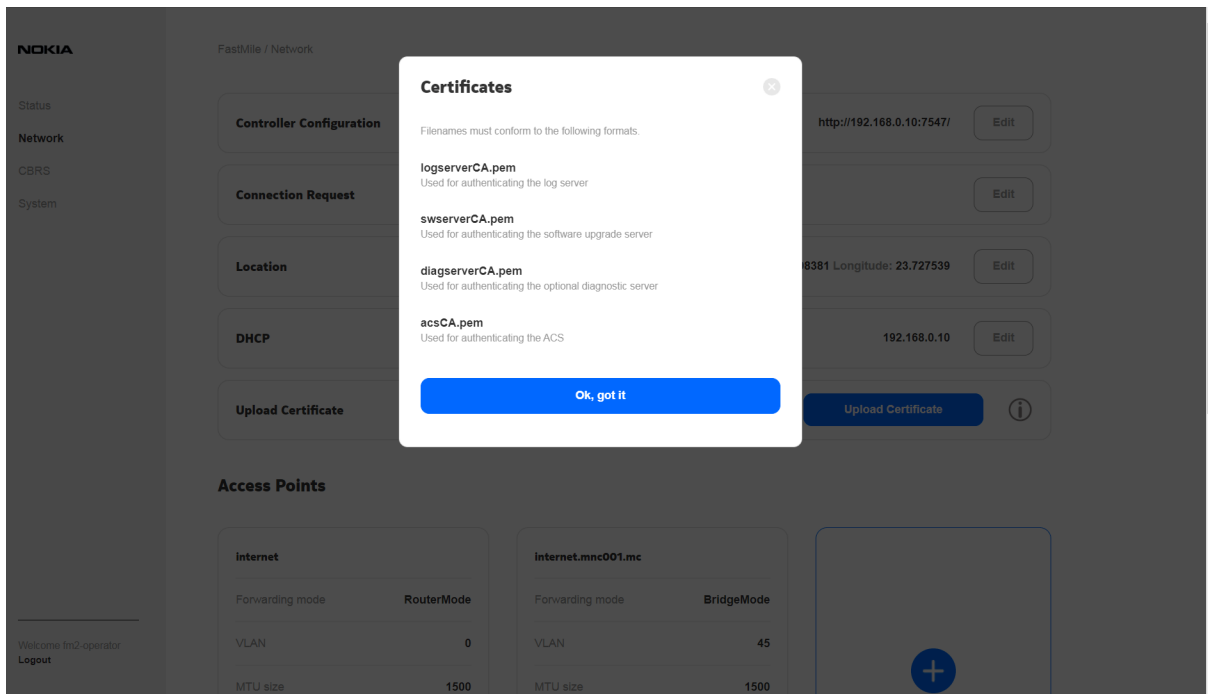
Figure 76 shows an example of the Add Cell window.

Figure 76   **Example of the Add Cell window**
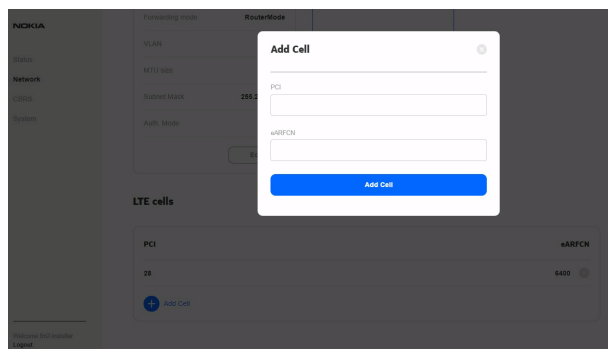
Figure 77 shows an example of the Delete Cell window.

Figure 77   **Example of the Delete Cell window**
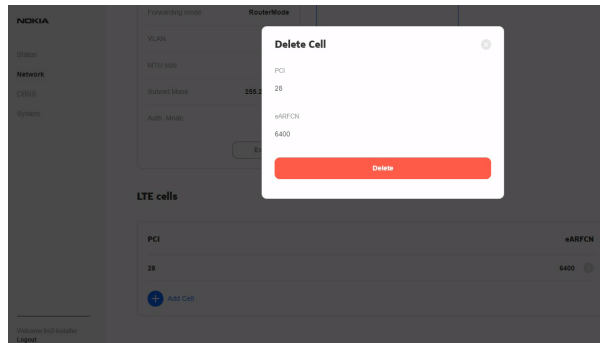
14.4   Using the Web UI CBRS screen

The Web UI CBRS (Citizens Broadband Radio Service) screen is intended for the US market and offers the possibility to display CBSD (Citizens Broadband Radio Service Device) parameters of the FastMile 4G Receiver, as well as to input registration information for CPI's (Certified Professional Installer) usage. Login is required. For details on the Web UI login, please refer to the *Customer Release Notes*.

The Web UI CBRS screen allows you to view the following FastMile 4G Receiver CBSD parameters:

• FCC (Federal Communications Commission) ID
• CBSD (Citizens Broadband Radio Service Device) Category
• Air interface
• Measurement Capability

Additionally, the Web UI CBRS screen allows you to input the following parameters:

• User ID
• CRL (Certificate Revocation List) file
• CRL (Certificate Revocation List) URL
• SAS Server URL

Figure 78 shows an example of the Web UI CBRS screen.

Figure 78   **Example of the Web UI CBRS screen**
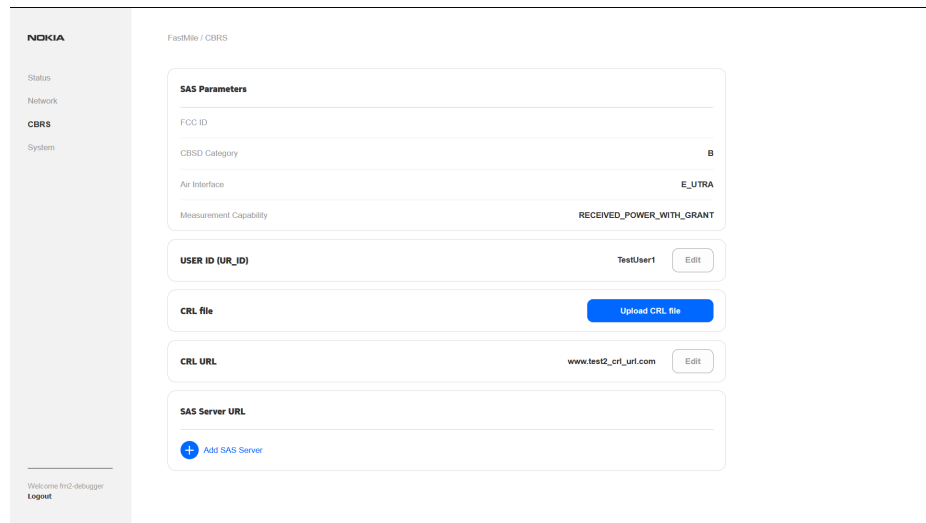
14.5   Using the Web UI system screen

The Web UI system screen allows you to perform advanced system actions on the FastMile 4G Receiver. Login is required. For details on the Web UI login, please refer to the *Customer Release Notes*.

The following advanced system capabilities are supported:

- Restart device: the FastMile 4G Receiver configuration remains intact
- Restore factory settings: factory configuration of the FastMile 4G Receiver is used; subsequent configuration is lost
- Update firmware:
    - before doing any firmware update action, make sure that the update path from the existing firmware to new firmware is supported by the FastMile 4G Receiver
    - new image is installed in the FastMile 4G Receiver; the FastMile 4G Receiver configuration remains intact
- Enable/disable LAN SSH access (by default LAN SSH access is enabled)
- Enable/disable WAN SSH access (by default WAN SSH access is disabled)

Figure 79 shows an example of the System screen.

Figure 79   **Example of the System screen**
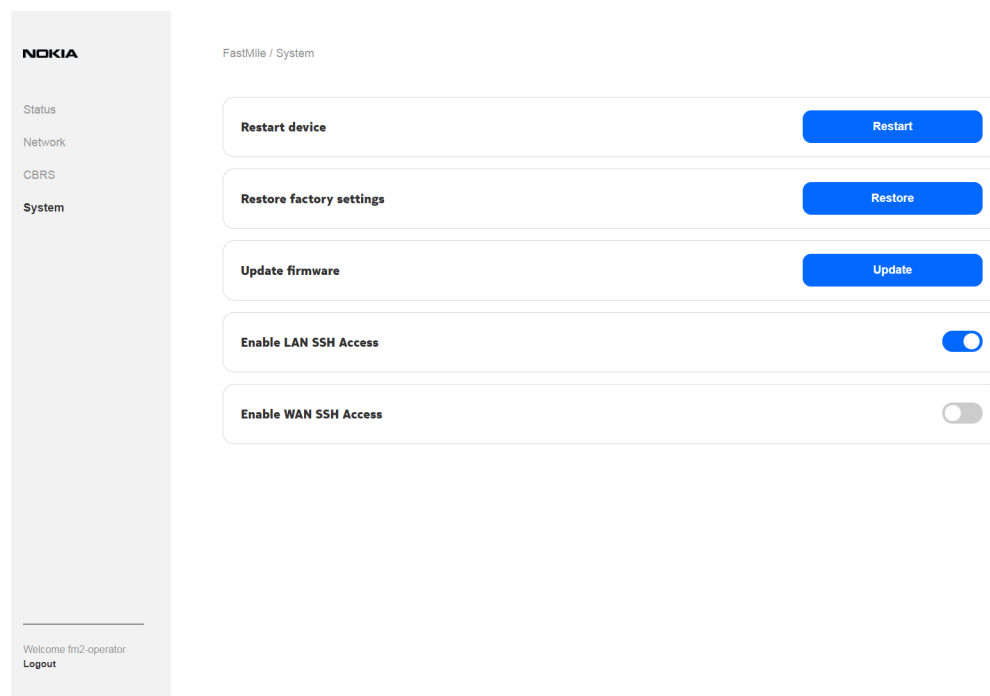
Figure 80 shows an example of the Restart Device confirmation window.

Figure 80   **Example of the Restart Device confirmation window**
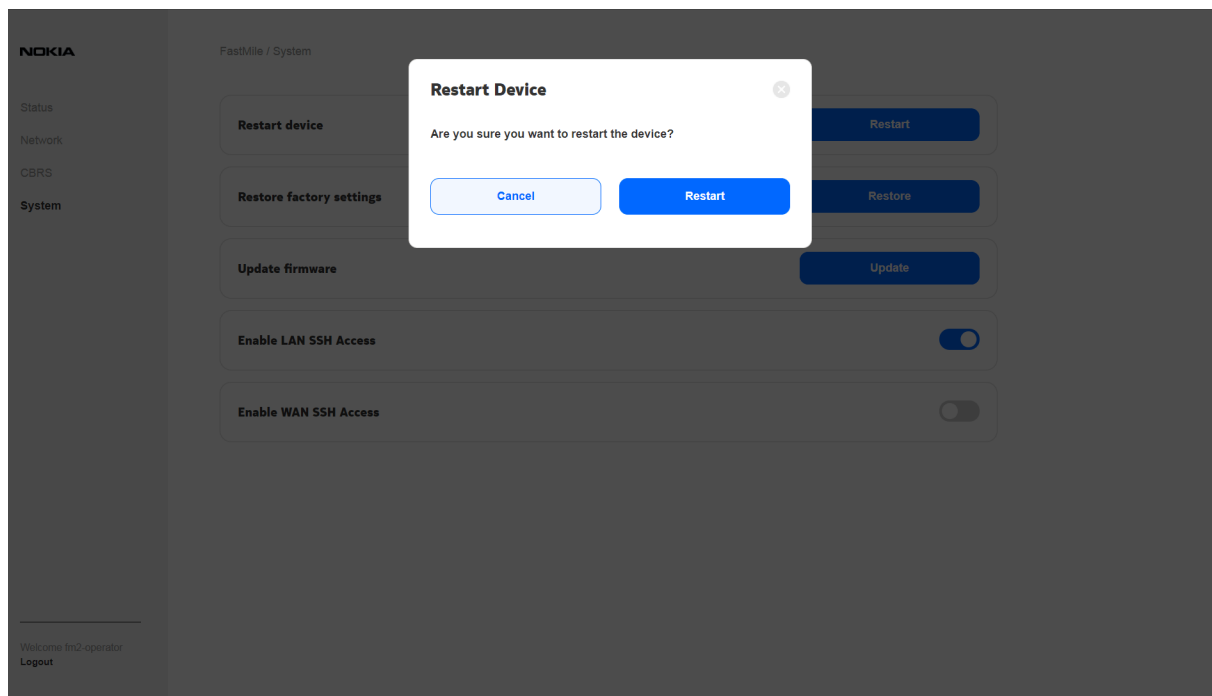
Figure 81 shows an example of the Restore Device confirmation window used to restore the device to factory settings.

Figure 81   **Example of the Restore Device confirmation window**
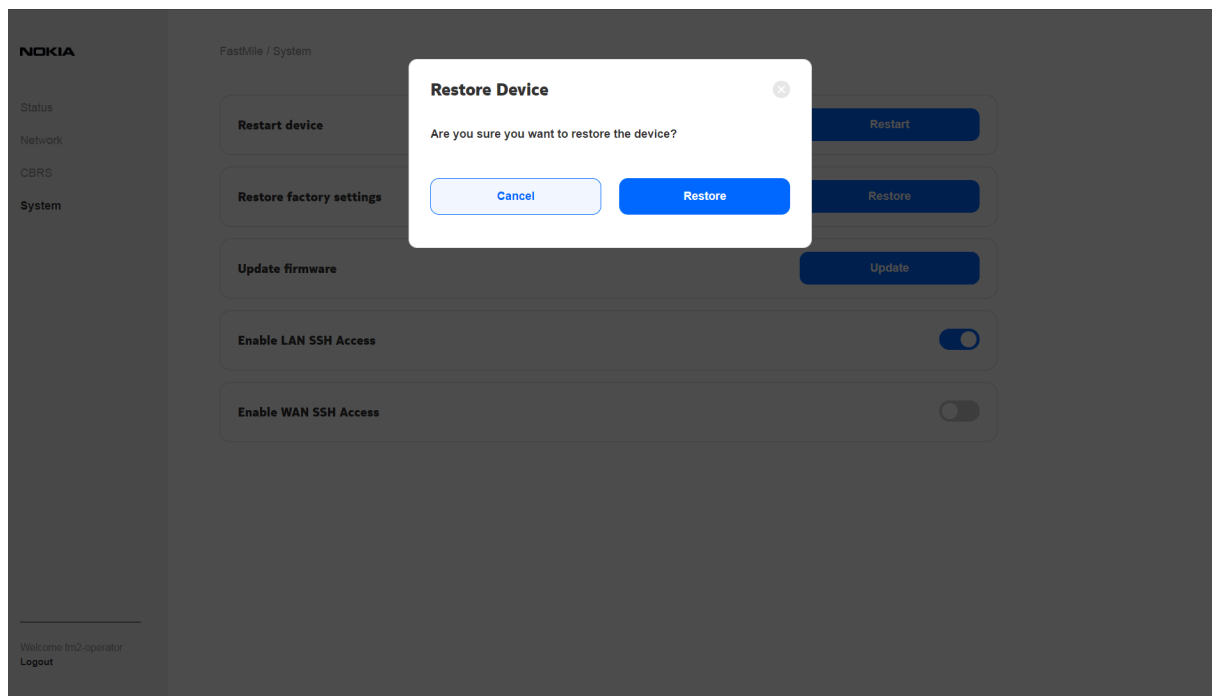
Figure 82 shows an example of the screen that displays while firmware is being uploaded.

Figure 82   **Example of the screen that displays while firmware is being uploaded**
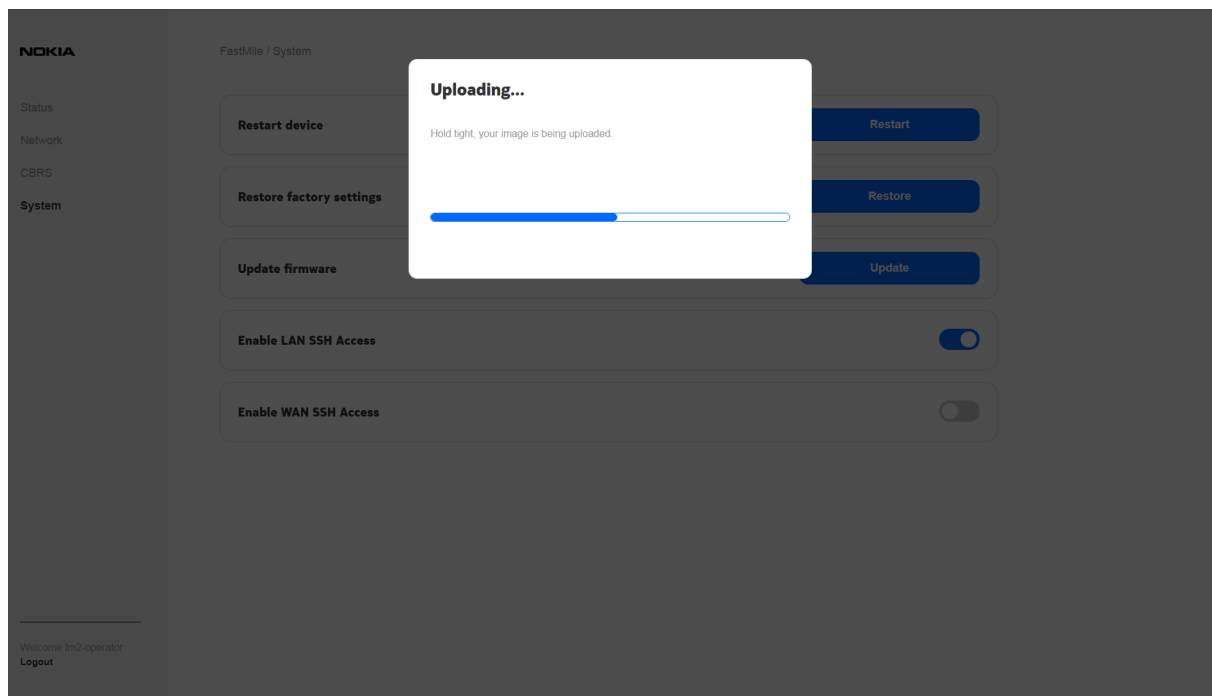
Figure 83 shows an example of the screen that displays while firmware is being upgraded.

Figure 83   **Example of the screen that displays while firmware is being upgraded**
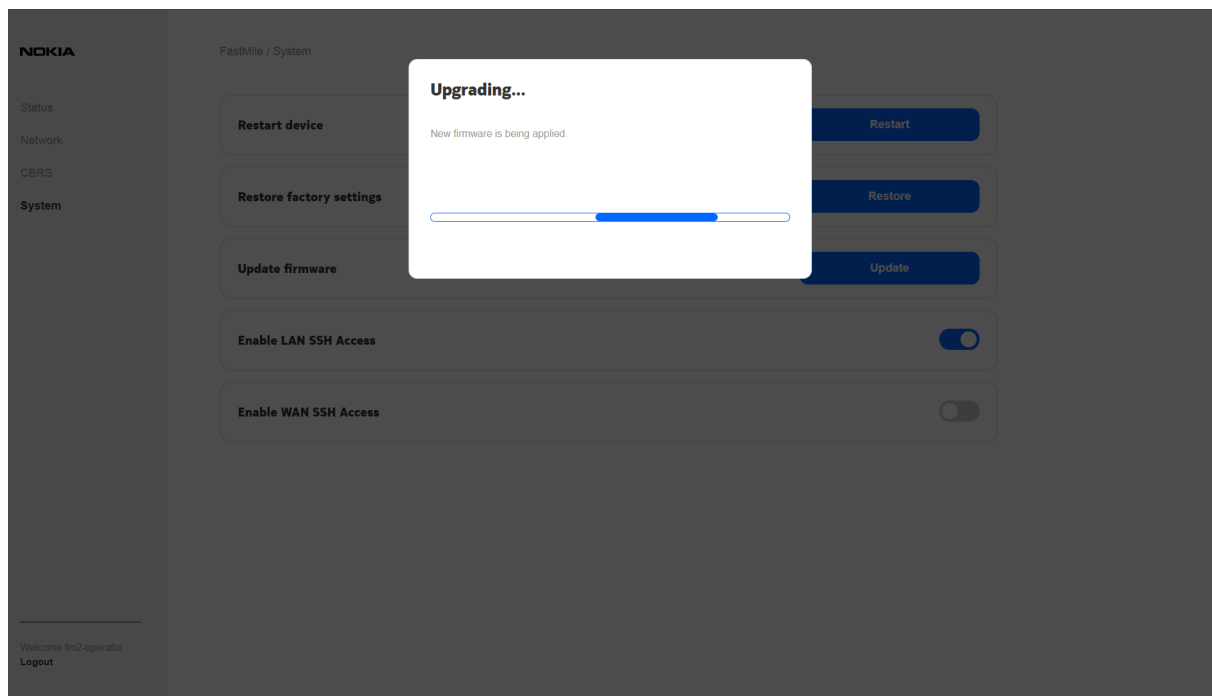
Figure 84 shows an example of the screen that displays while the system is being rebooted.

Figure 84   **Example of the screen that displays while the system is being rebooted**
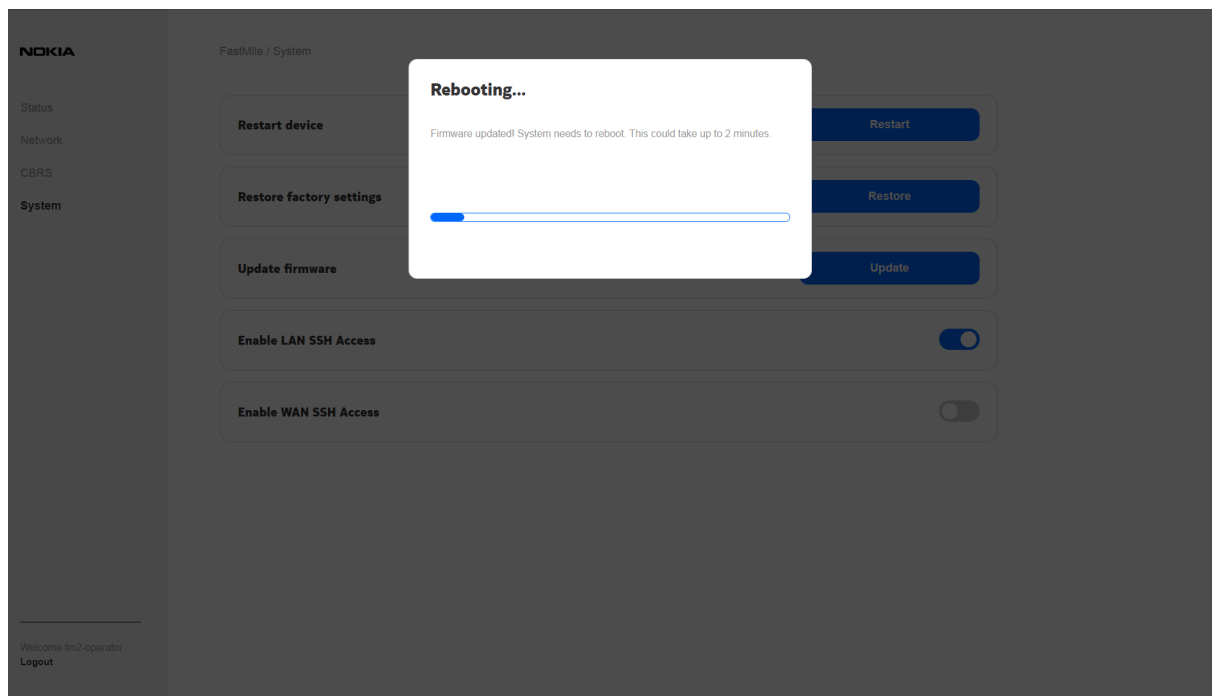
15 Standards certification

15.1 Standards certification for Compact mono-band and ABA models

15.2 Standards certification for the Compact multi-band models

15.1 Standards certification for Compact mono-band and ABA models

Table 24 provides standards certification information for the Compact mono-band and ABA models of the Nokia FastMile 4G Receiver.

Table 24   **Standards certifications for the Nokia FastMile 4G Receiver Compact mono-band and ABA models**

Category	Certifications
RF	EN 301 908-13 for Band 3, 7, 38, 40, 42, 43 of the Compact mono-band models and Band 42, 43 of the ABA model
	FCC 47 Parts 27 for Band 7 and 41 of the Compact mono-band models
	ISED for Band 42 and 43 of the ABA model
EMC	ETSI EN 301 489-1 and -52 for Band 3, 7, 38, 40, 42, 43 of the Compact mono-band models and Band 42, 43 of the ABA model
	FCC 47 part 2/15 for Band 7 and 41 of the Compact mono-band models
	ISED for Band 42 and 43 of the ABA model
RoHS	Directive 2011/65/EU
Safety	EN/IEC 60950-1; 60950-22
	UL 62368-1, UL 60950-22,UL 50E, EN/IEC 60529 (IP66)

The CE mark is valid for Band 3, 7, 38, 40, 42, 43 of the Compact mono-band models and Band 42, 43 of the ABA models.

The FCC ID is valid for Band 7 and 41 of the Compact mono-band models. See section 18.1 for the FCC ID for each model.

The ISED ID is valid for Band 42 and 43 of the ABA model.

See chapter 18 for FCC statements and label instructions.

15.2   Standards certification for the Compact multi-band models

<< are changes need in the table or the in text below the table for RCR ALU02675463 (Fastmile 4G - 4G06-A with pre-installed CBSD certificate) and/or RCR ALU02675458 (Fastmile 4G - 4G01-A with 20m pigtail and pre-installed CBSD cerfiticate)? >>

Table 25 provides standards certification information for the Compact multi-band models of the Nokia FastMile 4G Receiver.

Table 25   **Standards certifications for the Nokia FastMile 4G Receiver Compact multi-band models**

Category	Certifications
RF	EN 301 908-13 for the following: • Band 1, 3, 7, 20, 28, 38, and 40 of the Compact multi-band 4G05-A and 4G05-B models • Band 3, 7, 20, and 32 of the Compact multi-band 4G04-A model • Band 1, 3, 7, 20, and 32 of the Compact multi-band 4G17-A model • Band 7, 28, 42, and 43 of the Compact multi-band 4G06-A model FCC 47 Part 27 for Band 41 of the Compact multi-band 4G05-A and 4G05-B models and Band 2, 25,4, 66, and 7 of the Compact multi-band 4G06-A model
EMC	ETSI EN 301 489-1 and -52 for the following: • Band 1, 3, 7, 20, 28, 38, and 40 of the Compact multi-band 4G05-A and 4G05-B models • Band 3, 7, 20, and 32 of the Compact multi-band 4G04-A model • Band 1, 3, 7, 20, and 32 of the Compact multi-band 4G17-A model • Band 7, 28, 42, 43 of the Compact multi-band 4G06-A model FCC 47 part 2/15 for Band 41 of the Compact multi-band 4G05-A and 4G05-B models and Band 2, 25, 4, 66, 7 of the Compact multi-band 4G06-A model
RoHS	Directive 2011/65/EU
Safety	EN/IEC 60950-1; 60950-22 UL 62368-1, UL 60950-22,UL 50E, EN/IEC 60529 (IP66)

The CE mark is valid for Band 1, 3, 7, 20, 28, 38, 40 of the Compact multi-band 4G05-A and 4G05-B models and Band 3, 7, 20, and 32 of the Compact multi-band 4G04-A model and Band 1, 3, 7, 20, and 32 of the Compact multi-band 4G17-A model and Band B7,28,42,43 of the Compact multi-band 4G06-A model.

The FCC ID is valid for Band 41 of the Compact multi-band 4G05-A and 4G05-B models and Band 2, 25,4, 66, and 7 of the Compact multi-band 4G06-A model.

See section 18.1 for the FCC ID for each model.

See chapter 18 for FCC statements and label instructions.

16 Appendix A: Specifications

16.1   Specifications

Table 26 provides some specifications for the Nokia FastMile 4G Receiver.

Table 26   **Specifications for the Nokia FastMile 4G Receiver**

Item	Description
Dimensions	Compact multi-band models: 22.7 cm by 22.7 cm by 6.4 cm (8.94 in by 8.94 in by 2.52 in)
	Compact mono-band models: 23.5 cm by 23.5 cm by 5.2 cm (9.3 in by 9.3 in by 2 in)
	ABA models: 31.8 cm by 31.8 cm by 5.6 cm (12.5 in by 12.5 in by 2.2 in)
Weight	Compact multi-band models: 0.88 kg (1.9 lb)
	Compact mono-band models: 1.3 kg (2.9 lb)
	ABA models: 2 kg (4.4. lb)
Power consumption	Idle: 1.6 W
	Maximum: 12 W
Operating altitude	Maximum operating altitude is 3048 m (10 000 ft) above mean sea level
Non-operating altitude	Maximum non-operating altitude is 12 192 m (40 000 ft) above mean sea level
Operating temperature	Compact mono-band and ABA models: • –30°C to 65°C (–22°F to 149°F) Compact multi-band models: • Model 4G05-B: –40°C to 55°C (–40°F to 131°F) • models other than Model 4G05-B: –30°C to 55°C (–22°F to 131°F)
Storage temperature	–40°C to 85°C (–85°F to 185°F)
Humidity	5% to 95% non condensing
IP rating	IP66 TYPE3

17 Appendix B: RF exposure

17.1 RF exposure

17.1 RF exposure

<< are changes need in the table for RCR ALU02675463 (Fastmile 4G - 4G06-A with pre-installed CBSD certificate) and/or RCR ALU02675458 (Fastmile 4G - 4G01-A with 20m pigtail and pre-installed CBSD cerfiticate)? >>

The international standards used for the assessment of this device provide simple conformity assessment methods for low power electronic and electrical equipment to an exposure limit relevant to electromagnetic fields (EMF).

Table 27 indicates RF exposure distances for each model for:

- CE based on the compliance criteria for maximum permissible exposure as in CE Council Recommendation Directive 2014/53/EU
- FCC based on the compliance criteria for maximum permissible exposure as in FCC 47

Table 27   **RF exposure distances**

Model	RF exposure distance	
	CE	**FCC**
4G01-A	50 cm (19.69 in)	20 cm (7.87 in)
4G01-B	50 cm (19.69 in)	50 cm (19.69 in)
4G02-A	50 cm (19.69 in)	N/A
4G03-A	50 cm (19.69 in)	50 cm (19.69 in)
4G04-A	20 cm (7.87 in)	20 cm (7.87 in)
4G05-A	20 cm (7.87 in)	N/A
4G05-B	20 cm (7.87 in)	N/A
4G06-A	20 cm (7.87 in)	23 cm (9.06 in)
4G17-A	20 cm (7.87 in)	N/A

18   Appendix C: FCC statements and label instructions

18.1   FCC compliance statement

18.2   FCC radiation exposure statement

18.3   FCC label instructions

18.1   FCC compliance statement

<< are changes need in the table for RCR ALU02675463 (Fastmile 4G - 4G06-A with pre-installed CBSD certificate) and/or RCR ALU02675458 (Fastmile 4G - 4G01-A with 20m pigtail and pre-installed CBSD cerfiticate)? >>

Table 28 provides the FCC ID for the Nokia FastMile 4G Receiver.

Table 28   **FCC ID for Nokia FastMile 4G Receiver**

Model	FCC ID
4G01-A	2ADZR34003800FM20
4G01-B	2ADZR34003800FM201
4G02-A	Not applicable
4G03-A	2ADZR23002690FM20
4G05-A	2ADZR4G05A
4G05-B	Not applicable
4G06-A	2ADZR4G06A
4G17-A	Not applicable

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

1) This device may not cause harmful interference, and

2) This device must accept any interference received, including Interference that may cause undesired operation.

18.2   FCC radiation exposure statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distances indicated in chapter 17 between the radiator and your body.

18.3   FCC label instructions

The outside of final products that contains this module device must display a label referring to the enclosed module. This exterior label can use wording such as: "Contains Transmitter Module FCC ID: 2ADZR4G04A and 2ADZR4G05A". Any similar wording that expresses the same meaning may be used.

19 Glossary

This glossary provides the expansions and optional descriptions of most acronyms and initialisms that appear in this document.

3GPP   3rd Generation Partnership Project

ABA   Automated Beam Alignment

ACS   Auto Configuration Server

ANSI   American National Standards Institute

AP   Access Point

APN   Access Point Name

CA   Certificate Authority or Carrier Aggregation

CBRS   Citizens Band Radio Service

CRoHS   China Restriction of Hazardous Substances

DL   Downlink

DSCP   Differentiated Services Code Point

DUID   Device Unique Identifier

EARFCN   E-UTRA Absolute Radio Frequency Channel Number

ECI   External Call Interface

EPC   Evolved Packet Core

E-UTRA   Evolved Universal Terrestrial Radio Access

EIP   Electronic Information Products

EMC   Electromagnetic Compatibility

EMI   Electromagnetic Interference

EPC   Evolved Packet Core

ESD   Electrostatic Discharge

ETL   Electrotechnical Laboratory

ETSI   European Telecommunications Standards Institute

FCC   Federal Communications Commission

FDD   Frequency Division Duplex

FM	FastMile
HSS	Home Subscriber Server
IEEE	Institute of Electrical and Electronics Engineers
IP	International Protection or Internet Protocol
IPTV	Internet Protocol over Television
LAN	Local Area Network
LED	Light Emitting Diode
LTE	Long-Term Evolution
MAC	Media Access Control
MCV	Maximum Concentration Value or Minimum Concentration Value
MIMO	Multiple-Input Multiple-Output
MME	Mobility Management Entity
NAC	Network Access Control
NEC	National Electrical Code
OAM	Operations and Maintenance
PCI	Physical Cell Identifier
PCRF	Policy and Charging Rules Function
PDF	Portable Document Format
PIN	Personal Identification Number
PoE	Power over Ethernet
QCI	QoS Class Identifier
QoS	Quality of Service
QR	Quick Response
RF	Radio Frequency
RoHS	Restriction of Hazardous Substances
RSRP	Reference Signal Received Power
RSRQ	Reference Signal Received Quality
RSSI	Received Signal Strength Indicator

SIM	Subscriber Identify Module
SINR	Signal-to-Interference-plus-Noise Ratio
TCP	Transmission Control Protocol
TDD	Time Division Duplex
UDP	User Datagram Protocol
UL	Underwriters' Laboratories
	Uplink
URL	Uniform Resource Locater
VDC	Volts Direct Current
VoIP	Voice over Internet Protocol
VPN	Virtual Private Network
WiFi	Wireless Fidelity
ZIP	Compressed File

Customer document and product support

Customer documentation

Customer Documentation Welcome Page

Technical Support

Customer Documentation Technical Support

Documentation feedback

Customer Documentation Feedback