



NTN Application support

Decemeber 2025
v1.0

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Revision history

Date	Version	Description
16.12.2025	1.0	Initial release

1 Introduction

With the public launch of our NTN offering in December 2025 the Application libraries and examples is now integrated with our general nRF connect SDK.

The development of the application examples, available as nRF connect SDK add-ons, will continue and you should stay up to date with releases of these on git hub.

2 nRF connect SDK updates

The following has been added nRF connect SDK to support NTN:

- NTN library
 - link: [NTN library](#)
 - Description: New library for non-terrestrial network (NTN) related helpers. In the first phase, the library contains functionality for sending location updates to the modem. The library uses the AT%LOCATION AT command to subscribe to location update requests from the modem and to provide location updates.
- PDN library integrated into LTE link controller
 - link: [PDN_LTE_LC](#)
 - Description: Added PDN support to LTE link controller by copying over the PDN library (DEPRECATED) and making it a module in lte_lc. The most important changes are:
 - PDN handling is added as lte_lc module.
 - Added support for PDN events in LTE link controller event handler. The PDN callback is removed.
 - Added new PDN events LTE_LC_EVT_PDN_SUSPENDED and LTE_LC_EVT_PDN_RESUMED. These events supported by the mfw_nrf9151-ntn modem firmware are used with cellular profiles to indicate when PDNs are active, but temporarily not usable.

3 Serial Modem

Main updates/changes in [Serial Modem](#) Add on related to NTN:

- Refactoring of socket API. All commands now take a socket handle. Also adding support for hexadecimal sending and receiving.
- Changed default AT command terminator to CR.
- Add #XSENDNTF for when 8192 is set as flags
 - 8192 - Send unsolicited #XSENDNTF notification when the request is acknowledged by network. Unsolicited notification will be sent when the data is pushed to the network, or acknowledged by network (for TCP), or the timeout given by the AT_SO_SNDTIMEO socket option, is reached. Valid timeout values are 1 to 600 seconds. Further sends for the socket are blocked until the unsolicited notification is received.
 - In short: NTN transmission Radio level acknowledgement notification when sent data has been acknowledged by receiving end (e.g. Sateliot Satellite or Skylo ground station (bent pipe))

4 NTN Asset Tracker Template

Following updates have been added to the [NTN Asset tracker template](#) add-on.

- ATT NTN branches to use PDN and NTN libraries
 - link: [adapt app to PDN and NTN libraries](#)
 - Description: Adjustments made to the NTN module to adapt to new NTN library for location requests and PDN library deprecation, now managing PDN via LTE LC
- Remove band lock
 - Description: In prj.conf in the branches there was Band lock on B256. This work well in Europe, but it will cause connections to fail in regions where only B255 or B23 are supported by Skylo.

5 Liability disclaimer

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