

AT&T 3G Network Shutdown Product Change Notification

NimbeLink Corp

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1. Introduction

AT&T's planned sunset of their 3G (UMTS/HSPA) network for February 2022 could cause certain 4G LTE devices to stop functioning correctly unless device manufacturers take action to update them. This situation is not specific to NimbeLink products. **Every manufacturer of cellular modules that provided 3G fallback as a feature in the module capabilities will be affected by the ATT shutdown of the 3G network.**

To continue functioning after February 2022, affected devices must have their CEMODE set to 2, or the device may stop attaching to the network. Customers can implement this change by issuing the AT command "AT+CEMODE=2" to their existing products. NimbeLink has updated the manufacturing procedures to include this change. Products with date codes after 7/1/2021 have CEMODE set to 2 at the factory.

2. Affected Products

NL-SW-LTE-TNAG
NL-SW-LTE-TNAG-B
NL-SW-LTE-TC4NAG
NL-SW-LTE-S7588-T
NL-SW-LTE-S7588-T-C
NL-SW-LTE-S7588-V*
NL-SW-LTE-S7588-V-B*

* Only affected if customer loaded AT&T firmware onto Verizon SKU from NimbeLink

3. Device Details

3.1 NL-SW-LTE-TC4NAG

As mentioned above, products with the date code after 7/1/2021 have the CEMODE set to 2 from the factory.

Beginning in July 2021, the cellular module manufacturer began shipping units with this change already applied. These units can be identified as follows:

When issuing the AT#SWPKG command, the modem will respond with the following:

```
AT#SWPKG
```

```
25.20.666-P0F.666703
```

```
MOF.660006
```

```
P0F.666703
```

```
A0F.660006
```

```
OK
```

The emphasis above indicates the difference to look for.

4. Migration Overview

Customers with affected products must take action. All products that are currently deployed must be updated to set CEMODE to 2. The recommended approach is to update the host product's firmware to query the CEMODE parameter, and if not set to 2, host firmware should issue the command "AT+CEMODE=2". Follow up with a second query to confirm the value changed.

Below is an example command and response sequence for the NL-SW-LTE-TC4NAG product:

```
AT+CEMODE?
```

```
+CEMODE: 1
```

```
OK
```

```
AT+CEMODE=2
```

```
OK
```

```
AT+CEMODE?
```

```
+CEMODE: 2
```

Below is an example command and response sequence for the NL-SW-LTE-S7588-T product:

```
AT+CEMODE?  
+CEMODE: 1
```

```
OK  
AT+CEMODE=2
```

```
OK  
AT+CFUN=1,1
```

```
OK  
+SIM: x  
AT+CEMODE?  
+CEMODE: 2
```

```
OK
```

If you are unable to remotely connect with a device and update the host processor firmware to set the modem to CEMODE 2 then you have the following options.

1. Bring device back in house, remove Skywire modem, update Skywire modem in a development kit, then replace Skywire modem in device.

or

2. Ship end-users Skywire modem with CEMODE set to 2 and have end-user install into the device.

5. Mandatory Change

This change is a mandatory requirement in order to keep your devices able to connect to the AT&T cellular network. Failure to change the CEMODE setting will result in the device no longer able to connect to the network after February 2022.

6. Contact

For further information please contact NimbeLink at:

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