



# Delta SW Release Notes LE910Cx-NF/NFD 25.20.xx1-25.21.xx2

80561DSW10199A Rev. 8 – 2022-03-23

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## APPLICABILITY TABLE

### PRODUCTS

- ■ LE910C1-NF
- ■ LE910C1-NFD
- ■ LE910C4-NF
- ■ LE910C4-NFD

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## 1. INTRODUCTION

### 1.1. Scope

Scope of this document is to detail the corrections, changes or enhancements made to the software of Telit modules.

### 1.2. Audience

This document is intended for Telit customers.

### 1.3. Contact Information, Support

For general contact, technical support services, technical questions and report documentation errors contact Telit Technical Support at:

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- TS-AMERICAS@telit.com
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Alternatively, use:

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For detailed information about where you can buy the Telit modules or for recommendations on accessories and components visit:

<http://www.telit.com>

Our aim is to make this guide as helpful as possible. Keep us informed of your comments and suggestions for improvements.

Telit appreciates feedback from the users of our information.

#### 1.4. Related Documents

- 80502ST10950A AT Commands Reference Guide for LE910Cx



## 2. DELTA SW 25.21.XX0 – 25.21.XX2

### 2.1. New Features

Type	Description	SW 25.21.xx2
2764	Implemented parallel eth0 and wlan0	
2831	Added a third USB port to be used with AT commands	
	Update SVN to 12	
	Introduction of new Data Only Module variants (e.g. LE910Cx-NFD) , starting from the Data and Voice module software (e.g. MOF.XX0012 of LE910Cx-NF), disabling Voice and VoLTE features and keeping all the rest unchanged.	
62517	Added new MTU requirement from AT&T (10776 21.2)	

### 2.2. General Enhancements

Type	Description	SW 25.21.xx2
63809	Improved RING pin (pin R14) behavior	
63705	Improvements on AT#HTTPSND command behavior	
63530	#USBCFG setting is maintained even if firmware is downloaded into the module	
64427	Integrated the new driver to support an alternative RF duplexer switch	
61855/61606	Improved AT#NTP (Network Time Protocol) behavior	
63109	Added improvements of the RSRQ values in AT#CSURV command	
64279	Fixed the duplicated cells in AT#CSURV	
64663	Kept the baud rate value saved during the FOTA process	
	Updated the latest TS.25 Network Code	

### 2.3. Known Limitations

Type	Description	SW 25.21.xx2
<b>66433</b>	WE866C6 modules with MAC address not in one of the following ranges, 00217E330000 to 00217E33FFFF and 00217E590000 to 00217E5AFFFF, will not work with LE910Cx. There will be WLAN connection issues and data performance issues over WE866C6 WiFi. This issue will be addressed in the next sw version.	
<b>66848</b>	WE866C3 modules with MAC address in the range of 00217E920001 to 00217E94FFFF, will not work with LE910Cx SW. There will be WLAN connection issues and data performance issues over WE866C3 WiFi. This issue will be addressed in the next sw version.	

### 3. DELTA SW 25.20.XX9 – 25.21.XX0

#### 3.1. New Features

Type	Description	SW 25.21.xx0
2715	Implemented new #BNDRAM and #SELBNDDMODE commands	
2718	Added +CEVDP and +CEMODE commands on restore lists of #FW SWITCH	
2723	Added 10 sockets capabilities	
2733	AT\$XTRAEN: disabled gpsOneXTRA feature by default	
2732	AT#GTPEN: disabled by default	
2702	Set fixed Audio profiles	
2713	Added AT command for Audio USB interface sample rate to 8KHz	
2669	Implemented DTMF profiles selection	
2670	New AT command for RPM parameters control	
2626	Added a new parameter for BW selection	
2612	Implemented time out mechanism: <ssendtimeout>	
2594	Added pulling capability to M2M_GPIO driver in Linux	
2574	Disabled communication with MAX9867 at boot time	
2584	Added a third USB port to be used with AT commands	
2585	Modified LED status on Marvell Eth PHY driver	
2207	Integrated AT#WLANMODULE command for captive portal	
2555	Added extension to #APPRUN command for customer's app	
2554	Added #ARECD command	

<b>2563</b>	Added TZ change mechanism
<b>2533</b>	Added ADC support on Linux AP
<b>2507</b>	Set the APN also when context is already activated
<b>2450</b>	Supported eSIM API
<b>2487</b>	Added revert of SPI default usage
<b>2471</b>	Implemented URC when OUT_OF_SYNC error
<b>2452</b>	Moved modem CMUX to EasyAT - enhanced modem side DTR handler
<b>2431</b>	Added #NTP for other platforms compatibility
<b>2423</b>	Increased HTTPQRY parameter length to 250
<b>2426</b>	Added CMUX without HW flow control support
<b>2442</b>	Set '3' as default for LPP configuration
<b>2401</b>	Implemented Master PCM Constantly/LE910Cx/support Silabs SI 32185

### 3.2. General Enhancements

<b>Type</b>	<b>Description</b>	<b>SW 25.21.xx0</b>
<b>60901</b>	Added Jasper carrier configuration for ATT	
<b>60980</b>	Fixed the band priority list for ATT-Jasper	
<b>59631</b>	Applied AT&T Support for <CDR-CDS-110, CDR-CDS-112>	
<b>59590</b>	Fixed CMAS defection for LTE-BTR-5-4065 from DDA report	
<b>59198</b>	Update the latest TS.25 Network Code	

<b>57544</b>	Changed UE's Usage setting to 2-CS/PS mode 2(Data centric) as default from CS/PS mode 1 due to 3G sunset
<b>58354</b>	Enhanced AT&T LwM2M v20.3 requirements
<b>53142</b>	Improved specific application of [+CSMP] values
<b>52742</b>	Reset the value set by AT#SMOV command, AT&F1 command
<b>52468</b>	Fixed missing unsolicited messages on [#CFF] Call forwarding flags
<b>56381</b>	Concatenated AT commands in M2MATP=1 ode
<b>56359</b>	Improved behavior of #M2MRUN with files written by AppZone
<b>55669</b>	Removed curl bbappend
<b>56103</b>	Enhanced rawdata initialization of #FASTSHDN for enhanced FW SWITCH
<b>54944</b>	Fixed mcm_sms max 160 characters message sending issue
<b>54846</b>	Improved AT+CGDCONT behavior when <PDP_addr> is empty
<b>54431</b>	Updated CNV behavior while getting carrier name string for LWM2M
<b>58435</b>	Fixed FTPPUT and FTPAPP escape sequence handling
<b>60944</b>	Fixed issue for T-Mobile on UE not receiving XCAP during L_IMS_VoLTE_186001_1
<b>61490</b>	Improved behavior on 24hour connectivity test (IOT test server)
<b>58557</b>	Update SVN to 10
<b>62009</b>	Adjusted TCP Rcv buffer setting of HTTP
<b>62001</b>	Adjusted TCP Rcv buffer setting of SSL
<b>62000</b>	Added <scalefactor> on #TCPMAXWIN
<b>61432</b>	Fixed AT#ADSPC issue with +CME ERROR during GPRS attach

<b>60049</b>	Fixed CTM (Cellular Text Modem) audio tones over USB
<b>60093</b>	Stabilized TCP binary download on xx9-B010
<b>61563</b>	Fixed VoLTE call BUSY message when "486 Busy Here" SIP response
<b>60869</b>	Improved TXCAL4G during low power 0dbm
<b>61165</b>	Fixed coexistence issue for AT#SSLD and AT\$GPSSLSR
<b>60852</b>	Fixed wrong returned RSRQ value of Easyscan
<b>60627</b>	Improved module behavior while capturing GNSS location - 26 hours
<b>60562</b>	Fixed URC (+CIEV: call) issue
<b>60502</b>	Fixed AT#PDPAUTH command issue
<b>59739</b>	Improved AT#SSLD behavior in online mode
<b>60369</b>	Fixed FTP FOTA failure issue when omitted the FTP port number
<b>59116</b>	Fixed IPV6 TCP SYN packets and IPV4 MTU value
<b>59749</b>	Improved behavior of +WS46 SIM detection function in some HW conditions
<b>57806</b>	Fixed AppZone M2MB tasks wrong context when a task is created inside another one
<b>58436</b>	Fixed #FTPGETPKT? wrong <eof> report
<b>55912</b>	Applied LTE lib files to fix signal strength not updated on bcclocking
<b>58809</b>	Fixed mPCIe Power save issue
<b>54526</b>	Fixed SIM cards reject issue with access class between 11-15 (Public Utilities)
<b>56314</b>	Improved +CUSD result string encoding

<b>54045</b>	Fixed participant from VoLTE conference/multiparty dropping issue
<b>54782</b>	Now HTTPRCV correctly shows data
<b>54463</b>	Fixed DTMF detect stop issue during voice call
<b>53982</b>	Fixed 3G info nearby BTS stations missing on #MONI and #RFSTS
<b>58653</b>	Added AT#MQSUB support of qos value
<b>54887</b>	Fixed wrong #QSS query command response
<b>57282</b>	Enhanced <cause> parameter of #SI response display when <closuretype>=254
<b>56236</b>	Removed wrong error message form IPR after power cycle (AT&K3) on UART
<b>56807</b>	Improved #NTP and #NTPCFG behavior
<b>56692</b>	Enhancement to support concurrent scenario between Wi-Fi and Modem TCP/IP socket call over one PDN context.
<b>56886</b>	Implemented more than 256 bytes for +CGLA response support
<b>56647</b>	Fixed incorrect value of #TGPIO after #PSMWDISACFG set and TFI download
<b>56212</b>	Fixed incorrect value of #PSMWDISACFG after FWSWITCH
<b>59112</b>	Incorrect DTMF tone playback during call
<b>59000</b>	Fixed incorrect module behavior after PAUSE sequence
<b>58380</b>	Changed default value of roaming tag to1 in QCMAP
<b>59004</b>	Implemented the interfaces for APPS to access the SSL config resource
<b>58654</b>	Enhanced the #ETHCFG command to keep the DNS settings after reboot
<b>58130</b>	Fixed the #TONE hang issue

<b>57244</b>	Fixed timing issue with #APLAY command
<b>57921</b>	Added a delay on #ASEND response on UART
<b>52780</b>	Fixed FTPOPEN wrong behavior when authentication type is changed (#SSLSECCFG)
<b>57844</b>	Fixed connection closed issue when entering #SSLRECV continuously
<b>57614</b>	Fixed reboot issue after AT#HTTPQRY=0,1,"/"
<b>57152</b>	Added GAL SVs for position fix during long time tracking
<b>58025</b>	Set #BND? Correct respond as in AT user guide
<b>57512</b>	Fixed unwanted data usage when AT\$XTRAEN=0
<b>56354</b>	Fixed VoLTE and emergency calls issue (#CODECLSTCFG)
<b>56783</b>	Fixed incorrect audio and codecinfo: 0, 255 report when creating multiparty call - #CODECLSTCFG
<b>56422</b>	Added scripts and config files for secure boot enablement
<b>56169</b>	Added \$XTRAEN command for control XTRA disable/enable
<b>56016</b>	Fixed the wrong default CID value for AT#GPRS
<b>56030</b>	Fixed EVMONI RING incorrect behavior
<b>55242</b>	Fixed the wrong display with multiple connections on +CGDCONTRDP
<b>55330</b>	Fixed GNSS serial port issue
<b>53300</b>	Fixed HTTP server data with #HTTTPRCV, UART port issue
<b>55267</b>	Augmented max WiFi password length to 63 chars
<b>55165</b>	Fixed issue with correct value of AT\$GPSSAV after reboot
<b>54882</b>	Fixed call failing behavior when changing codec with #CODEC command.



<b>54986</b>	Fixed "REGISTERED" flag behavior with AT#EVMONI
<b>53869</b>	Implemented MQTT related AT commands
<b>53962</b>	Improved Call Disable Setting command behavior included into CLAC list
<b>53446</b>	Fixed not display SRING URC issue with AT#SL command
<b>53904</b>	Fixed wrong info stored as response to AT#EXCEPINFO
<b>2777408</b>	Fixed IPv4 call failure with XLAT after detach
<b>2015069</b>	Fixed incorrect KW error handling
<b>1109309</b>	Fixed endless resel_ind in weak area when earfcn/pci lock is enabled
<b>2631015</b>	Fixed duplicate message forward to WMS
<b>2713529</b>	Fixed EPC/UM iface teardown issue
<b>2699774</b>	Fixe the issue in CLAT teardown causing CLAT do not come UP again
<b>2708636</b>	Fixed error handling in CLAT default teardown logic
<b>2736203</b>	Moved CLAT SM to DOWN state after v6 iface down event is received
<b>2674211</b>	Implemented upper layer passing of incoming packets in TCP with multiple SSL sessions

### 3.3. Known Limitations

Type	Description	SW 25.20.XX0
	Increased boot-up time	

## 4. DELTA SW 25.20.XX8 – 25.20.XX9

### 4.1. New Features

Type	Description	SW 25.20.XX9
2401	Implemented Master PCM Constantly	
2238	Added AT Command API for MQTT feature	
2423	Increased HTTPQRY parameter length to 250	
2426	Implemented support of CMUX without HW flow control	
2442	Implemented LPP configuration default setting for Verizon (E911)	
2419	Added FIN/END/RST when <closureType> 255 on AT#SD command	
2431	Added #NTP for compatibility with other platforms	
2471	Added the possibility to get OUT_OF_SYNC URC	
NA	Updated SVN to 09	

### 4.2. General Enhancements

Type	Description	SW 25.20.XX9
58105	Fixed issue with TC: 105 OTADM-013-IPv6 Successful Connectivity Testing	
57497	Fixed issue while rejecting call with AT#CHLD=0 giving +CME ERROR	
57498	Added indication that current call status is BUSY.	
56692	Enhancement to support concurrent scenario between Wi-Fi and Modem TCP/IP socket call over one PDN context	

<b>54817</b>	Fixed E2E e911 testing
<b>56886</b>	Implemented the support of more than 256 bytes for +CGLA response
<b>56169</b>	Added \$XTRAEN command for xtra disable/enable control
<b>56016</b>	Fixed the wrong default cid value for AT#GPRS
<b>53528</b>	Special character displayed for COPN
<b>53904</b>	Fixed unexpected response issue of AT#EXCEPINFO command
<b>53446</b>	Fixed AT#SL not showing SRING URC the first time
<b>54159</b>	Fixed issue that caused rebooting after SD removal
<b>54238</b>	[+CCLK] Fixed invalid day value
<b>54197</b>	Fixed issue with e911 only allowed during ECBM (Emergency Call back Mode)
<b>55477</b>	Fixed issue for TC3.2 User Agent - Verizon e911 E2E Certification
<b>55711</b>	Fixed issue for e911 requirement that the user should remain in ECBM mode until it expires.
<b>54651</b>	Support of Verizon's Reqs-LTE-E911_FWT requirements
<b>54463</b>	Fixed DTMF tone detection issue
<b>53853</b>	Added build option to use rw root-fs for customer
<b>54700</b>	Fixed term signal handler in M2MB application framework
<b>54887</b>	Corrected wrong response of #QSS query command
<b>54782</b>	Fixed HTTPRCV not showing any data
<b>54846</b>	[AT+CGDCONT] set command returning ERROR when <PDP_addr> is empty

<b>54095</b>	Fixed wrong behavior with #HTTPSND and #HTTTPRCV over IPV6
<b>55044</b>	Fixed +CEDRXRDP wrong response format
<b>54882</b>	Fixed issue with AT#CODEC command
<b>55165</b>	Fixed AT\$GPSSAV not starting correctly after reboot
<b>55330</b>	Fixed an issue with NMEA not displayed when USB is connected and disconnected
<b>55557</b>	Fixed issue where m2mb_uart_read was blocked with a configured timeout
<b>54045</b>	Added notice when participant from VoLTE is dropped in a conference/multiparty
<b>56017</b>	Fixed syntax of #SHDN
<b>55717</b>	Update to the latest TS.25 Network Code
<b>53982</b>	Fixed missing 3G info nearby BTS stations on #MONI and #RFSTS
<b>55267</b>	Changed WiFi password limitation length to 63 chars
<b>56009</b>	Enhanced rawdata initialization for FWSWITCH

#### 4.3. Known Limitations

<b>ITEM</b>	<b>Description</b>	<b>25.20.XX9</b>
<b>NA</b>	SW version 25.20.xx9 is only for Verizon carrier, no AT&T/T-Mobile Single SKU is available. Next S.SKU maintenance release will be x10	

## 5. DELTA SW 25.20.XX6 – 25.20.XX8

### 5.1. New Features

Type	Description	SW 25.20.xx8
2132	Added additional parameters to #CSURV AT command	
2140	Added SSL functionality over HTTP	
2252	Added 464XLAT support	
2242	Added RTS as a wake-up event for AT+CFUN=0	
2313	Added gpsOneXTRA Assistance	
2289	Added the #LTESFN for reporting sysFrameNumber and subFrameNumber	
2215	Added Dying Gasp feature	
2276	Added a TFI option to specify com port	
2270	Implemented a new 16 BIT/I2S SLAVE/8KHZ setting	
2259	Extended #BCCHLOCK to LTE	
2211	Added #CSURV to scan for cells from multiple operators	
2255	Added NMEA configuration measurement supporting also GAL Satellites	
2343	Enabled SSH modifications	
2378	Enhanced application processor Security and Firewall	
2330	Added support for PZ-90 datum.	
2342	Added the ability to filter used SV by elevation angle on GNSS requirement for ERA	
2209	Implemented saving NVM settings separately after FWSWITCH	
2268	Disabled ADB interface	

<b>2256</b>	Changed power modes from internal user app
<b>2245</b>	Added AT Command to Enable/Disable the Cellular to Ethernet Bridge
<b>2262</b>	Added the possibility to manually select the SDIO clock speeds with AT commands
<b>2203</b>	Added #TSVOL digital mode support
<b>2049</b>	Reduced the delta files on FOTA update engine
<b>2173</b>	Added #BCCHLOCK Command
<b>2014</b>	Added an AT command to enable Zero Length packet patch by Qualcomm if not received by Host
<b>2151</b>	Added additional GPIOs for user application
<b>2154</b>	Implemented AT#EXCEPINFO for system condition diagnostics
<b>2163</b>	GNSS - Navigation rate updated
<b>2296</b>	Added serial / AT interface security for FirstNet features.
<b>2322</b>	Added secured socket over IPV6
<b>2372</b>	Enabled the LTE easy scan while not camped on LTE
<b>2327</b>	Added #WLANMODULE and #WLANDFS commands
<b>2274</b>	Added ethernet AT commands
<b>2306</b>	Implemented easyscan commands that report only LTE, WCDMA and GSM respectively
<b>2212</b>	Added AT Command for TX Calibration for 4G/LTE
<b>2188</b>	Added automatic #FW SWITCH
<b>2258</b>	Added unique module number available during boot sequence

## 5.2. General Enhancements

Type	Description	SW 25.20.xx8
51538	Fixed no response after performing at+cops=0	
51628	Fixed +CPMS response error with wrong values in input	
50754	Fixed long AT response lost on Easy AT port	
50082	Added MCM client issue patch	
49857	Synchronized +CCLK and \$date time	
45198	Fixed WE866C3 manager for AT#BSRVD command	
49619	Enhanced network description with QMI_NAS_GET_SERVING_SYSTEM	
49044	Added +CFUN=5 power saving mode only on main UART	
49170	Enhanced SSH init script to block wrong action	
48876	Enhanced power saving feature on CMUX	
48340	Added new AT#SIOWATERMARK command	
	Added support of LwM2M ATT 19.3	
49170	Enhanced SSH init script to block wrong actions	
50536	Updated LTE Band Priority List for FirstNet	
48507	Added manual download for Verizon NI FOTA with mandatory severity	
50222	Added CID 6 to AT socket commands for Verizon's second internet APN	
52610	Added AT+CGPADDR= answers with non-capital letters	
52658	Improved HTTPCFG command	
53012	Fixed UICC failed TCs (ETSI 31.124, TS 27.22.2)	

<b>52625</b>	Changed default roaming value in QCMAP
<b>53367</b>	Fixed reboot issue during AT#SSEND input mode
<b>52531</b>	Added IPV6 support over WiFi Made AT#CHBHCID as public Added third parameter support to AT#WLANSTART
<b>53517</b>	Fixed hang-up issue during initialization
<b>53962</b>	Fixed Call Disable Setting command non-responding issue
<b>52491</b>	Improved CSURVC behavior
<b>52579</b>	Fixed USSD data not displayed when receiving the specific DCS
<b>52334</b>	Supported SIMTK display alpha text for PTCRB
<b>49828</b>	Implemented FTPS function
<b>51289</b>	The Module is now providing data through HTTPRCV correctly (stop and stuck issue)
<b>51185</b>	Fixed the FOTA fail issue by changing file transfer method
<b>51847</b>	The NO CARRIER indication was not sent until another data or voice call command was sent
<b>50056</b>	Fixed WiFi auto connection
<b>51541</b>	Checked DDR hardware parameters for Winbond MCP
<b>51351</b>	Corrected "ERROR" return case with AT#CSURV command at some special pre-condition
<b>51507</b>	Changed CID range upper limit to 16 for #RNDIS and #ECM commands
<b>51218</b>	Fixed #QDNS failure with private SIM
<b>51167</b>	Fixed +CEER wrong message on activating ECM interface



<b>47432</b>	Fixed audio Chirp During DTMF Decoding
<b>51031</b>	Corrected SRING generation not happening while TCP client sends data to TCP server
<b>50556</b>	Added multiple EasyAT Client
<b>50797</b>	Fixed AT#SD getting unresponsive and giving wrong indication
<b>50949</b>	Updated the latest TS.25 Network Code 20th.Jan.2020
<b>50407</b>	Added <bearing> report value after a few minutes to \$GETLOCATION
<b>50422</b>	Fixed AT+CPIN? incorrect READY report with and without SIM card inserted when SIMDET=1
<b>50667</b>	Fixed a bug where DTMF detection was stopped using the AT+CPAS command during DTMF detection
<b>50829</b>	Update SVN to 08
<b>2082291</b>	Adjusted link MTU to AP for better performance
<b>2113332</b>	V6 packets getting fragmented at 1280B boundary instead of 1500B
<b>904232</b>	Fixed not logging IP packets
<b>2475757</b>	Fixed a TCP SACK kernel vulnerability
<b>2281542</b>	Freed buffer memory after server key exchange message processing

### 5.3. Known Limitations

<b>ITEM</b>	<b>Description</b>	<b>25.20.XX8</b>
<b>00144156</b>	<p>The use of URC display functions in previous SW releases might lead in 25.20.xx8 to unexpected unsolicited messages.</p> <p>Customer is highly recommended to validate the update in their application before use.</p>	

**57589**

AT#HSEN=0 , AT#SIMDET=1, AT&W, AT&P setting one time at first power on is needed to have SIM working on LE910C1 family. This issue will be fixed in the next maintenance release

## 6. DELTA SW 25.20.XX4 – 25.20.XX6

### 6.1. New Features

ITEM	Description	25.20.XX6
42242	IOTLocate Service and Enhancements for LTE CR1664	
43103	Added AT Command to activate GNSS – DPO CR1810	
43395	Added Remote SIM feature CR1865	
42617	Added M2MLocate feature CR1889	
43146	LE910Cx Audio over USB CR1918	
43230	USBCFG3 has no recovery from m-PCIe card in customer application CR1910	
44275	Added the AT command (AT#EMERGENCYFULL) related with LE910CX-NF emergency full search option in simless mode (L_IMS_VoLTE_6835_19 (TC 56231))	
44152	Add 119 as Emergency number (L_IMS_VoLTE_481842_3(TC60277)).	
2153	LE910C1 series Boot up time	
2146	Implement audio loop-back command #OAP	
2158	SSH enablement	
2113	DTMF Tone Source Notification. Added support to allow customers to distinguish between in-band and out-band DTMF tone	
	Changed SW version naming by new Telit convention	
1977	Enhancement DTMF duration on VoLTE network.	
1989	Adding new USB composition to support Wi-Fi bundling with WE866C3	
1937	Enhancement kernel driver to support Wi-Fi bundling with WE866C3	
2023	Support DTMF volume control on VoLTE network.	

<b>2074</b>	Support multiple chained certificates
<b>1991</b>	Support multiple SSL CA certificates and be able select one of them using AT command
<b>2073</b>	Qualcomm GTP feature implementation
<b>2003</b>	DTMF Tone Source Notification

## 6.2. General Enhancements

<b>ITEM</b>	<b>Description</b>	<b>25.20.XX6</b>
<b>44308</b>	Applied correct GPS RF Path loss value to enhance performance.	
<b>44323</b>	Improve the timing of FASTSHDN execution command	
<b>43275</b>	Enhance XFP for the corner case during downgrade	
<b>44274</b>	Add command for FTP FOTA wrong cid in the special case	
<b>43055</b>	Implement W_DISABLE_N feature	
<b>43453</b>	[#FASTSHDN] #GIPO state is difference with another pin when #FASTSHDN=1,4	
<b>43560</b>	Fixed #TESTMODE couldn't set LTE Band 66	
<b>43436</b>	CGEREP is not reporting PDP context state with URC message when using #SGACT commands	
<b>43338</b>	escape sequence included in data even after setting #SKIPESC in Online mode for AT SSL command	
<b>42895</b>	escape sequence include in data even after setting #SKIPESC online mode for AT socket command	

<b>43328</b>	Enabled the WCDMA related(geran_cap) and SRVCC related(nas_srvc_support) items.
<b>43276</b>	Fixed doesn't come out in power save mode when moving from CFUN=5 to CFUN=4.
<b>43261</b>	the ATS7 changed the default value to 0
<b>43035</b>	LE910C1 DVI Slave Mode issue
<b>43235</b>	[#CPBE] Fixed issue cannot read the emergency numbers after SIM reboot
<b>43184</b>	[#AUTOBND]default value for LE910Cx products
<b>43234</b>	Fixed issue failed to enter AT+CFUN=0 mode after URC event occurred
<b>43229</b>	flow control on UART after modem wake up from power saving
<b>43144</b>	AT+CFUN=0 is incorrect and does not change the CTS pin state
<b>43438</b>	Change the eDRX default value to disable
<b>43897</b>	Changed the nas signaling low priority default value to disable and cm_support default value to enable.
<b>2263735</b>	Fixed failure of TC59190 for TMO. Retry procedure was added for 420 error response code for reg event subscribe
<b>43522</b>	[+CPNER] Response format error for command of Primary notification event reporting
<b>43337</b>	[36.523-1 TC 11.2.7] Fixed the emergency mode of the network ECC from EMERGENCY_GW to EMERGENCY_GW_1X
<b>45388</b>	download file issue
<b>46724</b>	VZW Motive FOTA, VZ_TC_OD-OTADM_2314670
<b>46173</b>	Corrected ATA race condition found during DFIT
<b>1994</b>	reduce boot time for AZ app

<b>46019</b>	Added VoLTE call disconnect tone for no service and RTCP time out
<b>46307</b>	Fixed the display issue of duplicated CMAS for ATT LTE-BTR-5-4073/LTE-BTR-5-4086

## 7. DELTA SW 25.20.XX3 – 25.20.XX4

### 7.1. General Enhancements

ITEM	Description	SW 25.20.xx4
42242	Implemented IOTLocate Service	
43103	Added AT Command to activate GNSS - DPO	
43395	Added Remote SIM feature	
42617	Added M2MLocate feature	
43146	Added audio over USB	
44308	Applied correct GPS RF Path loss value to enhance performance	
43323	Improved the timing of FASTSHDN execution command	
43275	Enhanced XFP for the corner case during downgrade	
44274	Added command for FTP FOTA wrong cid in the special case	
43055	Implemented W_DISABLE_N feature	
43453	[#FASTSHDN] fixed #GIPO different state when #FASTSHDN=1,4	
43436	CGEREP is now reporting PDP context state with URC message when using #SGACT commands	
43338	Fixed escape sequence behavior after setting #SKIPESC in Online mode for AT SSL command	
43328	Fixed the value of capability items	
43276	Improved CFUN 5 to CFUN 4 behavior related on power save current	
43261	Changed the default value of ATS7 to 0	
43035	Fixed DVI Slave Mode issue	

43235	[#CPBE] Fixed wrong reading of the emergency numbers after SIM reboot
43184	[#AUTOBND] Set default value
43234	Fixed issue preventing entering AT+CFUN=0 mode after URC event
43229	Fixed flow control on UART after modem wake up from power saving
43144	Fixed AT+CFUN=0 incorrect behavior
44275	Added AT command AT#EMERGENCYFULL
43438	Changed the eDRX default value to disable
44152	Added 119 as Emergency number
43897	Changed the nas signaling low priority default value to disable and cm_support default value to enable



## 8. DELTA SW 25.20.XX2 – 25.20.XX3

### 8.1. General Enhancements

ITEM	Description	SW 25.20.xx3
	Disabled eDRX	
	Enabled SRVCC feature	
	Set to HSDPA Cat.4	
	UE sends response code 422 rather than 180 response because of session Interval too small	
	Set the full-service request in emergency call to disabled	
	Update the IMSI codes in the network personalization profile to support the following PLMN's: 313-110 / 313-120 / 313-130 / 313-140	
	Fixed roaming status reported between NOCN and non-MOCN site	

## 8.2. Known limitations

ITEM	Description	SW 25.20.xx3
44995	Can't get a valid fix position when using an active GNSS antenna with FW xx3. Fix position is possible with a passive GNSS antenna.	
44934	The AT#SWMCFG command returns an ERROR response that cause the FOTA update to fail because the Context ID is not set before use AT#FTPGETOTAENH.	

## 9. DELTA SW 25.20.XX1 – 25.20.XX2

### 9.1. General Enhancements

ITEM	Description	SW 25.20.xx2
	Ignored NI SUPL if the previous one is in progress and it's not ES	
	B13 handover failure fixed	
	Handling of STK SEND SMS waits for display state	
	MCM_ATCOP_REQ_V01 sync mode return error	
	Unwanted nmea sentence at nmea port	
	Jamming detection merge	
	Updated #icfg 9 - 3GPP_CONFERENCE_URI	

## 10. DOCUMENT HISTORY

Revision	Date	Changes
0	2019-02-14	Delta Sw 25.20.xx1 – 25.20.xx2 Delta Sw 25.20.xx2 – 25.20.xx3
1	2019-05-07	Delta Sw 25.20.xx3 – 25.20.xx4
2	2019-05-15	Added xx3 known limitations
3	2019-11-06	Delta SW 25.20.xx3 – 25.20.xx6
4	2020-09-04	Delta SW 25.20.xx6 – 25.20.xx8
5	2021-02-03	Added SIM issue to xx8 known limitations Delta SW 25.20.xx8 – 25.20.xx9
6	2021-07-12	Delta SW 25.20.xx9-25.21.xx0
7	2022-02-17	Added 25.21.xx0 known limitations Delta SW 25.21.xx0-25.21.xx2
8	2022-03-23	Added 25.21.xx2 known limitations



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[www.telit.com](http://www.telit.com)



Telit Communications S.p.A.  
Via Stazione di Prosecco, 5/B  
I-34010 Sgonico (Trieste), Italy

Telit Wireless Solutions Inc.  
3131 RDU Center Drive, Suite 135  
Morrisville, NC 27560, USA

Telit Wireless Solutions Ltd.  
10 Habarzel St.  
Tel Aviv 69710, Israel

Telit IoT Platforms LLC  
5300 Broken Sound Blvd, Suite 150  
Boca Raton, FL 33487, USA

Telit Wireless Solutions Co., Ltd.  
8th Fl., Shinyoung Securities Bld.  
6, Gukjegeumyung-ro8-gil, Yeongdeungpo-gu  
Seoul, 150-884, Korea

Telit Wireless Solutions  
Tecnologia e Servicos Ltda  
Avenida Paulista, 1776, Room 10.C  
01310-921 São Paulo, Brazil

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