

## PSBN DEVICE CATEGORIES COMPLIANCE MATRIX

### CATEGORY 1 – IN-VEHICLE ROUTERS

Description	Device Form Factor	Use
Router with multiple modems, including at least Band Class 14, and additional options such as Ethernet, USB and Wi-Fi connectivity.	<ul style="list-style-type: none"> <li>• Typical: 5.5 x 6.0 x 1.9 inches. Or other sizes to meet specific vehicle installation needs such as a motorcycle</li> <li>• Mountable</li> <li>• Heat baffles for cooling</li> <li>• External connectors for antenna(s)</li> <li>• External ports for Ethernet connectivity</li> <li>• External USB ports</li> </ul>	<p>Installed in a vehicle it provides the data session connectivity for the vehicle's devices.</p> <ul style="list-style-type: none"> <li>• Primary use is for internal first responder systems and applications to access the B14 LTE system or secondary LTE carrier to connect internal vehicle equipment via Ethernet, USB or Wi-Fi and enhance coverage through the use of an external antenna(s).</li> <li>• Primary Vehicles to use this variant will be Police cars, Police SUVs, Police Motorcycles, Fire Trucks, other fire vehicles, Paramedic vehicles, patrol and fire boats, and possibly helicopters</li> </ul>

**VENDOR NAME:** \_\_\_\_\_

**DEVICE NAME:** \_\_\_\_\_

**DEVICE MODEL:** \_\_\_\_\_

**DEVICE VERSION:** \_\_\_\_\_

**APPENDIX A**  
**SOQ FORM 3.1**

*RFSQ NO. LA-RICS 010*

*Amended and Restated in Addendum B*

Reference No.	In-Vehicle Router Requirements	Device Mandatory Minimum Qualifications (X = Yes)	Vendor's Device Compliant? (Vendor shall mark column with X)		Vendor Comments
			YES	NO	
<b>LTE RF Elements</b>					
1.1	Device must support Band Class 14 (BC14_UE).	X			
1.2	Device is a Power Class 3 UE.	X			
1.3	BC14_UE is a 3GPP Category 3 or 4 device.				
1.4	BC14_UE has external antenna ports to allow for vehicle rooftop mounting of antenna for all functions – MIMO LTE, Wi-Fi and GPS.	X			
1.5a	Device simultaneously supports B14 and one commercial wireless carrier operations.	X			
1.5b	Device can simultaneously support two commercial carriers. Identify each carrier supported.				
1.6	Device can simultaneously support B14 and two or more commercial wireless carrier operations (desired). Identify each carrier supported.				
1.7	Device is supplied with Antenna Kit, cables, and other associated parts to complete installation of the device in a vehicle: motorcycle, car, SUV or truck as specified by agency.	X			
<b>UE Characteristics</b>					
1.8	LTE modem(s) can be installed in the device in the field without voiding its warranty	✘			
1.9	UICC(s) can be installed in the device in the field without voiding its warranty	X			
1.10	There is a unique UICC for each mobile service provider (LTE band) supported in the device.				
1.11	Device supports interworking with the USIM/USAT applications in the UICC per 3GPP 31.101, 31.102 and 31.111.	X			

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*RFSQ NO. LA-RICS 010*

*Amended and Restated in Addendum B*

Reference No.	In-Vehicle Router Requirements	Device Mandatory Minimum Qualifications (X = Yes)	Vendor's Device Compliant? (Vendor shall mark column with X)		Vendor Comments
			YES	NO	
1.12	Device is fully compliant with all FCC Technical Advisory Board minimum requirements. Ref: <a href="http://apps.fcc.gov/ecfs/document/view?id=7021919873">http://apps.fcc.gov/ecfs/document/view?id=7021919873</a>	X			
1.13	Device meets operational conditions of ambient temperature of 0 to 130 degrees Fahrenheit. MIL SPEC 810G. Test certification must be on record with the LA-RICS Authority.	X			
1.14	Device meets operational ambient conditions of temperature of -22 to 140 degrees Fahrenheit or better. MIL SPEC 810G. Test certification must be on record with the LA-RICS Authority.				
1.15	Device operational ambient temperature of -22 to 170 degrees Fahrenheit or better is desired. Test certification must be on record with the LA-RICS Authority.				
1.16	Device must pass shock resistant to 90 cm drop on any of six sides. MIL SPEC 810. Test certification must be on record with the LA-RICS Authority.	X			
1.17	Device must be certified vibration resistant for light truck transportation model using MIL STD-810G, or equivalent. Test certification must be on record with the LA-RICS Authority.	X			
1.18	Device has at least one Ethernet RJ-45 port (10/100/1000).	X			
1.19	Device has two or more Ethernet RJ-45 ports (10/100/1000).				
1.20	Device has one or more USB 2.0 ports.	X			
1.21	Device has one or more USB 3.0 ports.				
1.22	Device supports an OBD- II interface.				
1.23	Device supports HDOBD interface.				
1.24	Device must be certified IEC 60529 or equivalent for intrusion protection (IP) of IP54 or better without the use of a third party enclosure. IEC test certification must be on record with the LA-RICS Authority.	✘			

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*RFSQ NO. LA-RICS 010*

*Amended and Restated in Addendum B*

Reference No.	In-Vehicle Router Requirements	Device Mandatory Minimum Qualifications (X = Yes)	Vendor's Device Compliant? (Vendor shall mark column with X)		Vendor Comments
			YES	NO	
1.25	Device must be certified IEC 60529 or equivalent for IP66 or better without the use of a third-party enclosure. IEC test certification must be on record with the LA-RICS Authority				
1.26	Installation kit, mounting hardware and instructions required to maintain UL and other applicable safety certification(s).				
1.27	Power accessories: All necessary parts including, but not limited to connectors and harnesses to power the vendor's router via a nominal 10 - 30 VDC power source (e.g. vehicle battery).	X			
1.28	Antenna for LTE operations across all supported bands with 3G fallback, Mag mount with ground plane, 15 ft (or similar) antenna cabling with connectors.				
1.29	GPS SMA Mag-Mount antenna				
1.30	Wi-Fi SMA Mag-Mount antenna				
1.31	7-foot Ethernet cable available as an option or procured separately				
1.32	Connector accessory: A locking mechanism for connectors to solidly fasten USB to device.				
1.33	Warranty and any offerings for extended warranties for the device must be on record with the LA-RICS Authority.	X			
1.34	Provide installation documentation and limited training for 3 <sup>rd</sup> party installation vendors	✗			
<b>Motorcycle Specific UE Requirements</b>					
1.35	Device is certified vibration resistant for motorcycle transportation model using MIL STD-810G, or equivalent. Test certification must be on record with the LA-RICS Authority.	✗			
1.36	Device has a small profile suitable for mounting on a motorcycle.	✗			
1.37	Device accessories necessary for mounting on a motorcycle including power cabling, antenna, and miscellaneous hardware.	✗			

Reference No.	In-Vehicle Router Requirements	Device Mandatory Minimum Qualifications (X = Yes)	Vendor's Device Compliant? (Vendor shall mark column with X)		Vendor Comments
			YES	NO	
<b>Wi-Fi and Bluetooth</b>					
1.38	Device supports Wi-Fi station (STA) protocol IEEE 802.11b/g/n in the 2.4GHz band.	X			
1.39	Device supports Wi-Fi station (STA) protocol IEEE 802.11b/g/n with operations in both 2.4 and 5.8 GHz bands.				
1.40	UE supports Wi-Fi offload and may or may not support session persistence.				
1.41	EIRP of device exceeds 17 dBm with supported MIMO configuration				
1.42	EIRP of device exceeds 24 dBm with supported MIMO configuration				
1.43	The device supports Wi-Fi Access Point (STA) protocol IEEE 802.11a in the 4.9 GHz band.				
1.44	Device supports Wi-Fi station (AP) protocol IEEE 802.11b/g/n with operations in dual bands, 2.4 and 5.8 GHz.				
1.45	EIRP of device exceeds 17 dBm with supported MIMO configuration				
1.46	EIRP of device exceeds 24 dBm with supported MIMO configuration				
1.47	The device supports Wi-Fi Access Point (AP) protocol IEEE 802.11a in the 4.9 GHz band.				
1.48	The device may support Wi-Fi Station (STA) protocol IEEE 802.11a in the 4.9 GHz band.				
1.49	The device supports WPA2-Enterprise				
1.50	If the device has WPS capability, it must support disabling that feature.	X			
1.51	The device supports at least one SSID.				
1.52	The device supports multiple SSIDs.				

Reference No.	In-Vehicle Router Requirements	Device Mandatory Minimum Qualifications (X = Yes)	Vendor's Device Compliant? (Vendor shall mark column with X)		Vendor Comments
			YES	NO	
1.53	The device is capable of non-broadcast or hidden SSIDs.				
1.54	The device supports Bluetooth 4.0 or higher.				
1.55	The device supports the IEEE 802.11s mesh networking amendment to the IEEE 802.11 specification.				
<b>GPS</b>					
1.56	The device supports autonomous (standalone) 3-channel, or higher GPS solution.				
1.57	The device supports autonomous (standalone) 3-channel, or higher GPS solution and at least one other satellite system (e.g. GLONASS).				
1.58	The device supports autonomous 12-channel, or higher GPS and GPS augmentation (WAAS).				
1.59	The device support autonomous GPS (USA GPS) and at least one other satellite system (e.g., Galileo, European GPS) and GPS augmentation.				
1.60	The GPS position is refreshed at a rate of 5 Hz or faster.				
1.61	The GPS position is refreshed rate of 1 Hz or faster.				
<b>Device Management</b>					
1.62	The device policies are settable via OMA-DM 1.2v (or higher) compliant managers.	✘			
1.63	Device supports LA-RICS certified extensions to the OMA DM Management Information Bases (MIBs).				
1.64	The device provisioning may be settable via vendor's proprietary Web-based management.				
<b>Applications</b>					
1.65	Device is compatible and tested with NetMotion's Locality software.				

Reference No.	In-Vehicle Router Requirements	Device Mandatory Minimum Qualifications (X = Yes)	Vendor's Device Compliant? (Vendor shall mark column with X)		Vendor Comments
			YES	NO	
1.66	An LTE performance application is supported by the device supplier				
1.67	Vendor supported Automatic Vehicular Location (AVL) device client. Management may be via OMA-DM 1.2v or Web based.				
<b>UE Security</b>					
1.68	The device utilizes a trusted boot.	✘			
1.69	The device utilizes a hardware root of trust and trusted boot.				
1.70	The device utilizes a hardware root of trust and trusted boot, and attestation.				
1.71	The UE supports Advanced Authentication (AA) as defined by CJIS security policies. Ref: <a href="http://www.fbi.gov/about-us/cjis/RequirementsDocument.pdf">http://www.fbi.gov/about-us/cjis/RequirementsDocument.pdf</a>				
1.72	The device is FIPS 140-2 security class level 1 certified by an accredited Cryptographic Module Testing laboratory. Test certification must be on record with the LA-RICS Authority.				
1.73	The device must meet FIPS 140-2 security class level 2 certified by an accredited Cryptographic Module Testing laboratory. Test certification must be on record with the LA-RICS Authority.				
<b>UI Interface</b>					
1.74	Device includes an integral speaker(s) that is louder than customary in consumer devices. Decibels to be defined.				
1.75	Device uses noise cancellation technology.				
1.76	User interface (UI) display is designed for outdoor use with brighter screen than found on consumer devices.				
1.77	Device touchscreen operates successfully with gloves on.				

Reference No.	In-Vehicle Router Requirements	Device Mandatory Minimum Qualifications (X = Yes)	Vendor's Device Compliant? (Vendor shall mark column with X)		Vendor Comments
			YES	NO	
<b>Certification</b> (Note 1,2)					
1.78	Device must be FCC Part 90 certified. Test certification must be on record with the LA-RICS Authority.	X			
1.79	Device must be FCC Part 15 certified. Test certification must be on record with the LA-RICS Authority.	X			
1.80	Device is PTCRB certified for Band 14 operations. Test certification must be on record with the LA-RICS Authority.	X			
1.81	Device is certified for operation on the alternate carriers to be used in the operation of the device. Test certification must be on record with the LA-RICS Authority.	X			
1.82	Device must be IOT certified with Ericsson RAN. The IOT test plan will be consistent with published CTIA Certification Test Plans. The expectation is that the tests should be executed by a CTIA Authorized Test Lab. <b>Specific test suites to be provided by LARICS.</b> Normative Reference: <a href="http://www.ctia.org/policy-initiatives/wireless-device-certification/certification-test-plans">http://www.ctia.org/policy-initiatives/wireless-device-certification/certification-test-plans</a>	X			
1.83	Device must be <del>certified to be</del> interoperable with the Motorola/Mformation device management system. Test cases will be consistent with Interoperability test cases in the OMA document: "Enabler Test Specification for Device Management", Jan 2008 Normative reference: <a href="http://technical.openmobilealliance.org/Technical/Release_Program/docs/ETS/OMA-ETS-DM-V1_2-20110128-C.pdf">http://technical.openmobilealliance.org/Technical/Release_Program/docs/ETS/OMA-ETS-DM-V1_2-20110128-C.pdf</a>	X			



Reference No.	In-Vehicle Router Requirements	Device Mandatory Minimum Qualifications (X = Yes)	Vendor's Device Compliant? (Vendor shall mark column with X)		Vendor Comments
			YES	NO	
1.84	Device must be <i>conformance</i> tested on the LA-RICS network by the vendor under the observation and approval of LA-RICS personnel or its agents. The base conformance test plan will follow CTIA's, "Certification Program Test Plan", see link below. The detailed step-by-step IOT plan will be developed by the vendor, then reviewed and approved by LA-RICS. Normative Reference: <a href="http://www.ctia.org/docs/default-source/default-document-library/ctia-test-plan-for-lte-interoperability.pdf?sfvrsn=0">http://www.ctia.org/docs/default-source/default-document-library/ctia-test-plan-for-lte-interoperability.pdf?sfvrsn=0</a>	X			
1.85	Device must be <i>acceptance</i> tested by LA-RICS. Test plan may be based upon all processes from device ordering through drive tests on the LA-RICS network. The purpose of the tests is to operationalize the device and ensure a good quality user experience.	X			

Note:

- 1.) As part of LA-RICS acceptance testing (post-PTCRB certification) should test with included antenna(s) supplied with device as applicable.
- 2.) If a certified mPCI modem is utilized within the device, then the modem certification will carry over to the next higher assembly.

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**PSBN DEVICE CATEGORIES COMPLIANCE MATRIX**

**CATEGORY 2 – USB MODEMS**

Description	Device Form Factor	Use
USB modem that provides LTE radio connectivity for devices that support USB modems.	USB, 3.7 X 1.3 X 0.5 inches or other sizes as defined by the manufacturer	USB connection into laptops (MDTs), tablets, and in-vehicle routers to provide LTE connectivity.

**VENDOR NAME:** \_\_\_\_\_

**DEVICE NAME:** \_\_\_\_\_

**DEVICE MODEL:** \_\_\_\_\_

**DEVICE VERSION:** \_\_\_\_\_

**APPENDIX A**  
**SOQ FORM 3.2**

*RFSQ NO. LA-RICS 010*

*Amended and Restated in Addendum B*

Reference No.	USB Modems Requirements	Device Mandatory Minimum Qualifications (X = Yes)	Vendor's Device Compliant? (Vendor shall mark column with X)		Vendor Comments
			YES	NO	
<b>LTE RF Elements</b>					
2.1	Device supports Band Class 14 (BC14_UE).	X			
2.2	Device is a Power Class 3 UE.	X			
2.3	BC14_UE is a 3GPP Category 3 or 4 device.	X			
2.4	BC14_UE has external antenna ports.				
2.5	External antenna kit (if applicable).				
<b>UE Characteristics</b>					
2.6	Device supports interworking with the USIM/USAT applications in the UICC per 3GPP 31.101, 31.102 and 31.111.	X			
2.7	Device is fully compliant with all FCC Technical Advisory Board minimum requirements. Ref: <a href="http://apps.fcc.gov/ecfs/document/view?id=7021919873">http://apps.fcc.gov/ecfs/document/view?id=7021919873</a>	X			
2.8	Device meets operational conditions of ambient temperature of 0 to 130 degrees Fahrenheit. MIL SPEC 810G. Test certification must be on record with the LA-RICS Authority.	✗			
2.9	Device meets operational ambient conditions of temperature of -22 to 140 degrees Fahrenheit or better. MIL SPEC 810G. Test certification must be on record with the LA-RICS Authority.				
2.10	The device meets USB 3.0 specifications.				
2.11	List any accessories that are supported for this device such as anchor bracket, an extension USB cord, etc.				
2.12	The device supplier shall provide connection manager software (driver) that operates with the USB modem. These driver(s) shall be indicate which operating system(s) are supported and have been verified (e.g.; Windows 7)	X			

Reference No.	USB Modems Requirements	Device Mandatory Minimum Qualifications (X = Yes)	Vendor's Device Compliant? (Vendor shall mark column with X)		Vendor Comments
			YES	NO	
2.13	Warranty and any offerings for extended warranties for the device must be on record with the LA-RICS Authority.	X			
<b>eUICC Management</b>					
2.14	If the USB only uses an eUICC or embedded SIM then the UICC specifications apply for this device.	X			
<b>Certification</b>					
2.15	Device must be FCC Part 90 certified. Test certification must be on record with the LA-RICS Authority.	X			
2.16	Device is PTCRB certified for Band 14 operations. Test certification must be on record with the LA-RICS Authority.	X			
2.17	Device is certified for operation on the alternate carriers to be used in the operation of the device. Test certification must be on record with the LA-RICS Authority.	<del>X</del>			
2.18	Device must be IOT certified with Ericsson RAN. The IOT test plan will be consistent with published CTIA Certification Test Plans. The expectation is that the tests should be executed by a CTIA Authorized Test Lab. <b>Specific test suites to be provided by LARICS.</b>  Normative Reference: <a href="http://www.ctia.org/policy-initiatives/wireless-device-certification/certification-test-plans">http://www.ctia.org/policy-initiatives/wireless-device-certification/certification-test-plans</a>	X			

Reference No.	USB Modems Requirements	Device Mandatory Minimum Qualifications (X = Yes)	Vendor's Device Compliant? (Vendor shall mark column with X)		Vendor Comments
			YES	NO	
2.19	Device must be <i>conformance</i> tested on the LA-RICS network by the vendor under the observation and approval of LA-RICS personnel or its agents. The base conformance test plan will follow CTIA's, "Certification Program Test Plan", see link below. The detailed step-by-step IOT plan will be developed by the vendor, then reviewed and approved by LA-RICS. Normative Reference: <a href="http://www.ctia.org/docs/default-source/default-document-library/ctia-test-plan-for-lte-interoperability.pdf?sfvrsn=0">http://www.ctia.org/docs/default-source/default-document-library/ctia-test-plan-for-lte-interoperability.pdf?sfvrsn=0</a>	X			
2.20	Device must be <i>acceptance</i> tested by LA-RICS. Detailed test plan will be based upon all processes from device ordering through drive tests on the LA-RICS network. The purpose of the tests is to operationalize the device and ensure a good quality user experience.	X			

## PSBN DEVICE CATEGORIES COMPLIANCE MATRIX

### CATEGORY 3 – SMARTPHONES

Description	Device Form Factor	Use
LTE Smart Phone that operates on Band Class 14 as well as at least one other carriers networks.	<ul style="list-style-type: none"> <li>Typical: 5.55 x 2.97 x 0.53 inches</li> <li>Minimum 4.7 inch touch screen.</li> <li>Ports for Audio headphones</li> <li>Micro USB</li> <li>Controls for volume, power, etc.</li> <li>Hardened Case and screen</li> <li>Speakerphone capability</li> </ul>	Handheld smart phone for data and non-mission critical voice services. <ul style="list-style-type: none"> <li>Hardened for rugged use</li> </ul>

**VENDOR NAME:** \_\_\_\_\_

**DEVICE NAME:** \_\_\_\_\_

**DEVICE MODEL:** \_\_\_\_\_

**DEVICE VERSION:** \_\_\_\_\_

**APPENDIX A**  
**SOQ FORM 3.3**

RFSQ NO. LA-RICS 010

Amended and Restated in Addendum C

Reference No.	Smartphone Requirements	Device Mandatory Minimum Qualifications (X = Yes)	Vendor's Device Compliant? (Vendor shall mark column with X)		Vendor Comments
			YES	NO	
<b>LTE RF Elements</b>					
3.0	Device must support Band Class 14 (BC14_UE).	X			
3.1	Device is a Power Class 3 UE.	X			
3.2	BC14_UE is a 3GPP Category 3 or 4 device.				
3.3	BC14_UE has external antenna ports to allow for vehicle rooftop mounting of antenna for all functions – MIMO LTE, Wi-Fi and GPS				
3.4	Device supports B14 and one commercial wireless carrier operations as an alternate when B14 is not available	X			
3.5a	Device can support B14 and two or more commercial wireless carrier operations as alternates when B14 is not available (desired). Identify each carrier supported.				
3.5b	Device can simultaneously support two commercial wireless carriers. Identify each carrier supported.				
3.6	Device accessories: Device is supplied with docking station, Antenna Kit, cables, and other associated parts to complete installation of the device in a vehicle: motorcycle, car, SUV or truck as specified by agency.				
<b>UE Characteristics</b>					
3.7	UICC(s) can be installed in the device in the field without voiding its warranty.	X			
3.8	There is a unique UICC for each mobile service provider (LTE band) supported in the device.				
3.9	The device should be able to support virtual SIMs (multiple profiles) on a single UICC slot.				
3.10	Device supports interworking with the USIM/USAT applications in the UICC per 3GPP 31.101, 31.102 and 31.111.	X			

**APPENDIX A**  
**SOQ FORM 3.3**

*RFSQ NO. LA-RICS 010*

*Amended and Restated in Addendum C*

Reference No.	Smartphone Requirements	Device Mandatory Minimum Qualifications (X = Yes)	Vendor's Device Compliant? (Vendor shall mark column with X)		Vendor Comments
			YES	NO	
3.11	Device is fully compliant with all FCC Technical Advisory Board minimum requirements. Ref: <a href="http://apps.fcc.gov/ecfs/document/view?id=7021919873">http://apps.fcc.gov/ecfs/document/view?id=7021919873</a>	X			
3.12	Device meets operational conditions of ambient temperature of 0 to 130 degrees Fahrenheit. MIL SPEC 810G. Test certification must be on record with the LA-RICS Authority.	<del>X</del>			
3.13	Device meets operational ambient conditions of temperature of -22 to 140 degrees Fahrenheit or better. MIL SPEC 810G. Test certification must be on record with the LA-RICS Authority.				
3.14	Device must pass MIL SPEC 810 G test for shock resistant to 90 cm drop on any of six sides. Test certification must be on record with the LA-RICS Authority.	X			
3.15	Device must be certified vibration resistant for light truck transportation model using MIL STD-810G, or equivalent. Test certification must be on record with the LA-RICS Authority.				
3.16	Device has one or more Micro-USB, USB 2.0, or USB 3.0 connector.	X			
3.17	Device must be certified IEC 60529 for intrusion protection (IP) of IP54 or better without the use of a third party enclosure. IEC test certification must be on record with the LA-RICS Authority.				
3.18	Device must be certified IEC 60529 for IP66 or better without the use of a third-party enclosure. IEC test certification must be on record with the LA-RICS Authority.				
3.19	Power accessories: All necessary parts for powering device including AC/DC power adapter brick and cord for 100-240 VAC, 50-60Hz power source. Specify your minimum and maximum battery life during idle and working conditions and recharging time.	X			
3.20	Power accessories: additional replaceable battery and battery charger.				



**APPENDIX A  
SOQ FORM 3.3**

*RFSQ NO. LA-RICS 010*

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Reference No.	Smartphone Requirements	Device Mandatory Minimum Qualifications (X = Yes)	Vendor's Device Compliant? (Vendor shall mark column with X)		Vendor Comments
			YES	NO	
3.21	Identify and recommend accessories that work with and support of the unit such as 1.) Micro USB cable 2.) Wired head phones 3.) Bluetooth head phones 4.) Vehicle charger 5.) Vehicle cradle 6.) External cases 7.) Screen covers 8.) Holster smartphone holder 9.) External port extender cradle to enable connection to external antenna 10.) External antenna 11.) Installation kit				
3.22	Warranty and any offerings for extended warranties for the device must be on record with the LA-RICS Authority.				
3.23	Identify the processor and memory configuration (and options) used in the device. LA-RICS would prefer to internal memory storage at least 32GB that is expandable up to 128GB.				
3.24	Identify the current OS (operating system) used with the smartphone device. LA-RICS recommends that the smartphone device support the current OS and be software upgradable to the next OS.				
<b>Wi-Fi and Bluetooth</b>					
3.25	Device supports Wi-Fi station (STA) protocol IEEE 802.11b/g/n in the 2.4GHz band.				
3.26	Device supports Wi-Fi station (STA) protocol IEEE 802.11b/g/n with operations in both 2.4 and 5.8 GHz bands.				
3.27	Device supports Wi-Fi offload and may or may not support session persistence.				

**APPENDIX A**  
**SOQ FORM 3.3**

*RFSQ NO. LA-RICS 010*

*Amended and Restated in Addendum C*

Reference No.	Smartphone Requirements	Device Mandatory Minimum Qualifications (X = Yes)	Vendor's Device Compliant? (Vendor shall mark column with X)		Vendor Comments
			YES	NO	
3.28	EIRP of device exceeds 17 dBm with supported MIMO configuration				
3.29	EIRP of device exceeds 24 dBm with supported MIMO configuration				
3.30	The device supports Wi-Fi Access Point (STA) protocol IEEE 802.11a in the 4.9 GHz band.				
3.31	Device supports Wi-Fi station (AP) protocol IEEE 802.11b/g/n with operations in dual bands, 2.4 and 5.8 GHz.				
3.32	EIRP of device exceeds 17 dBm with supported MIMO configuration				
3.33	EIRP of device exceeds 24 dBm with supported MIMO configuration				
3.34	The device supports Wi-Fi Access Point (AP) protocol IEEE 802.11a in the 4.9 GHz band.				
3.35	The device may support Wi-Fi Station (STA) protocol IEEE 802.11a in the 4.9 GHz band.				
3.36	The device supports WPA2-Enterprise				
3.37	If the device has WPS capability, it must support disabling that feature.	X			
3.38	The device supports at least one SSID				
3.39	The device supports multiple SSIDs				
3.40	The device is capable of non-broadcast or hidden SSIDs.				
3.41	The device supports Bluetooth 4.0 or higher.				
<b>GPS</b>					
3.42	The device supports autonomous (standalone) 3-channel, or higher GPS solution.				
3.43	The device supports autonomous (standalone) 3-channel, or higher GPS solution and at least one other satellite system (e.g. GLONASS).	X			
3.44	The device supports autonomous 12-channel, or higher GPS and GPS augmentation (WAAS).				
3.45	The device support autonomous GPS (USA GPS) and at least one other satellite system (e.g., Galileo, European GPS) and GPS augmentation.				

**APPENDIX A**  
**SOQ FORM 3.3**

*RFSQ NO. LA-RICS 010*

*Amended and Restated in Addendum C*

Reference No.	Smartphone Requirements	Device Mandatory Minimum Qualifications (X = Yes)	Vendor's Device Compliant? <small>(Vendor shall mark column with X)</small>		Vendor Comments
			YES	NO	
3.46	The GPS position is refreshed at a rate of 5 Hz or faster. High sampling rate required for high-speed vehicles.				
3.47	The GPS position is refreshed rate of 1 Hz or faster.				
<b>Device Management</b>					
3.48	The device policies are settable via OMA-DM 1.2v (or higher) compliant managers.				
3.49	Device supports LA-RICS certified extensions to the OMA DM Management Information Bases (MIBs).				
3.50	The device provisioning may be settable via vendor's proprietary Web-based management.				
<b>Applications</b>					
3.51	Device is compatible and tested with NetMotion's Locality software.				
3.52	An LTE performance application is supported by the device supplier				
3.53	Vendor supported push-to-talk (PTT) device client is managed by OMA-DM 1.2v compliant server.				
3.54	Vendor supported Automatic Vehicular Location (AVL) device client. Management may be via OMA-DM 1.2v, or Web based.				
3.55	Vendor supported weather client.				
3.56	Vendor supported Internet Browser.				
3.57	Circuit switched voice or VoLTE.	X			
3.58	Vendor supported VoIP application (SIP based).				
3.59	Vendor supported Messaging (SMS and MMS).	X			
3.60	Vendor supported CMAS client.	X			
3.61	Vendor supported email client.	X			
<b>UE Security</b>					
3.62	The device utilizes a trusted boot.				
3.63	The device utilizes a hardware root of trust and trusted boot.				

**APPENDIX A**  
**SOQ FORM 3.3**

*RFSQ NO. LA-RICS 010*

*Amended and Restated in Addendum C*

Reference No.	Smartphone Requirements	Device Mandatory Minimum Qualifications (X = Yes)	Vendor's Device Compliant? (Vendor shall mark column with X)		Vendor Comments
			YES	NO	
3.64	The device utilizes a hardware root of trust and trusted boot, and attestation				
3.65	The UE supports Advanced Authentication (AA) as defined by CJIS security policies. Ref: <a href="http://www.fbi.gov/about-us/cjis/RequirementsDocument.pdf">http://www.fbi.gov/about-us/cjis/RequirementsDocument.pdf</a>				
3.66	The device is FIPS 140-2 security class level 1 certified by an accredited Cryptographic Module Testing laboratory. Test certification must be on record with the LA-RICS Authority.				
3.67	The device must meet FIPS 140-2 security class level 2 certified by an accredited Cryptographic Module Testing laboratory. Test certification must be on record with the LA-RICS Authority.				
<b>UI Interface</b>					
3.68	Device includes an integral speaker(s) that is louder than customary in consumer devices. Describe the Decibels of your handset	X			
3.69	Device uses noise cancellation technology.	X			
3.70	User interface (UI) display is designed for outdoor use with brighter screen than found on consumer devices.	X			
3.71	Device touchscreen operates successfully with gloves on.				
<b>Certification</b>					
3.72	Device must be FCC Part 90 certified. Test certification must be on record with the LA-RICS Authority.	X			
3.73	Device must be FCC Part 15 certified. Test certification must be on record with the LA-RICS Authority.	X			
3.74	Device is PTCRB certified for Band 14 operations. Test certification must be on record with the LA-RICS Authority.	X			
3.75	Device is certified for operation on the alternate carriers to be used in the operation of the device. Test certification must be on record with the LA-RICS Authority.	X			

Reference No.	Smartphone Requirements	Device Mandatory Minimum Qualifications (X = Yes)	Vendor's Device Compliant? (Vendor shall mark column with X)		Vendor Comments
			YES	NO	
3.76	<p>Device must be IOT certified with Ericsson RAN. The IOT test plan will be consistent with published CTIA Certification Test Plans. The expectation is that the tests should be executed by a CTIA Authorized Test Lab. <b>Specific test suites to be provided by LARICS.</b></p> <p>Normative Reference: <a href="http://www.ctia.org/policy-initiatives/wireless-device-certification/certification-test-plans">http://www.ctia.org/policy-initiatives/wireless-device-certification/certification-test-plans</a></p>	X			
3.77	<p>Device must be interoperable with the device management system. Test cases will be consistent with Interoperability test cases in the OMA document: “Enabler Test Specification for Device Management”, Jan 2008</p> <p>Normative reference: <a href="http://technical.openmobilealliance.org/Technical/Release_Program/docs/ETS/OMA-ETS-DM-V1_2-20110128-C.pdf">http://technical.openmobilealliance.org/Technical/Release_Program/docs/ETS/OMA-ETS-DM-V1_2-20110128-C.pdf</a></p>	X			
3.78	<p>Device must be <i>conformance</i> tested on the LA-RICS network by the vendor under the observation and approval of LA-RICS personnel or its agents. The base conformance test plan will follow CTIA’s, “Certification Program Test Plan”, see link below. The detailed step-by-step IOT plan will be developed by the vendor, then reviewed and approved by LA-RICS.</p> <p>Normative Reference: <a href="http://www.ctia.org/docs/default-source/default-document-library/ctia-test-plan-for-lte-interoperability.pdf?sfvrsn=0">http://www.ctia.org/docs/default-source/default-document-library/ctia-test-plan-for-lte-interoperability.pdf?sfvrsn=0</a></p>	X			
3.79	<p>Device must be <i>acceptance</i> tested by LA-RICS. Test plan may be based upon all processes from device ordering through drive tests on the LA-RICS network. The purpose of the tests is to operationalize the device and ensure a good quality user experience.</p>	X			

## PSBN DEVICE CATEGORIES COMPLIANCE MATRIX

### CATEGORY 4 – TABLETS

Description	Device Form Factor	Use
Rugged tablet computer.	Typical: 9.0 x 6.5 x 1.3 inches or other suitable dimension as specified by the manufacturer <ul style="list-style-type: none"> <li>USB ports</li> <li>Power ports</li> <li>Battery</li> <li>Hardened Case</li> <li>Touch screen</li> <li>Ability to add external keyboard</li> </ul>	May be fixed in a vehicle, or carried by a First Responder. Multiple screen sizes to meet implementation applications.

**VENDOR NAME:** \_\_\_\_\_

**DEVICE NAME:** \_\_\_\_\_

**DEVICE MODEL:** \_\_\_\_\_

**DEVICE VERSION:** \_\_\_\_\_

Reference No.	Tablet Requirements	Device Mandatory Minimum Qualifications (X = Yes)	Vendor's Device Compliant? (Vendor shall mark column with X)		Vendor Comments
			Yes	No	
<b>LTE RF Elements</b>					
4.1	Device must support Band Class 14 (BC14_UE).	X			
4.2	Device is a Power Class 3 UE.	X			
4.3	BC14_UE is a 3GPP Category 3 or 4 device.				
4.4	BC14_UE has external antennae ports to allow for vehicle rooftop mounting of antennae for all functions – MIMO LTE, Wi-Fi and GPS.				
4.5	Device simultaneously supports B14 and one commercial wireless carrier operations. Identify each carrier supported.	X			
4.6	Device can simultaneously support B14 and two or more commercial wireless carrier operations (desired). Identify each carrier supported.				
4.7	Device accessories: Device is supplied with docking station, Antenna Kit, cables, and other associated parts to complete installation of the device in a vehicle: motorcycle, car, SUV or truck as specified by agency.				
4.8	Provide installation documentation and limited training for 3 <sup>rd</sup> party installation vendors	<del>X</del>			
<b>UE Characteristics</b>					
4.9	LTE modem(s) can be installed in the device is the field without voiding its warranty.				
4.10	UICC(s) can be installed in the device in the field without voiding its warranty.				
4.11	There is a unique UICC for each mobile service provider (LTE band) supported in the device.				
4.12	Device supports interworking with the USIM/USAT applications in the UICC per 3GPP 31.101, 31.102 and 31.111.	X			

**APPENDIX A**  
**SOQ FORM 3.4**

*RFSQ NO. LA-RICS 010*

*Amended and Restated in Addendum B*

Reference No.	Tablet Requirements	Device Mandatory Minimum Qualifications (X = Yes)	Vendor's Device Compliant? <small>(Vendor shall mark column with X)</small>		Vendor Comments
			Yes	No	
4.13	Device is fully compliant with all FCC Technical Advisory Board minimum requirements. Ref: <a href="http://apps.fcc.gov/ecfs/document/view?id=7021919873">http://apps.fcc.gov/ecfs/document/view?id=7021919873</a>	X			
4.14	Device meets operational conditions of ambient temperature of 0 to 130 degrees Fahrenheit. MIL SPEC 810G. Test certification must be on record with the LA-RICS Authority.	✗			
4.15	Device meets operational ambient conditions of temperature of -22 to 140 degrees Fahrenheit or better. MIL SPEC 810G. Test certification must be on record with the LA-RICS Authority.				
4.16	Device must pass shock resistant to 90 cm drop on any of six sides. MIL SPEC 810. Test certification must be on record with the LA-RICS Authority.	X			
4.17	Device must be certified vibration resistant for light truck transportation model using MIL STD-810G, or equivalent. Test certification must be on record with the LA-RICS Authority.				
4.18	Device has two or more Ethernet RJ-45 ports (10/100/1000).				
4.19	Device has one Ethernet RJ-45 ports (10/100/1000).				
4.20	Device has one or more USB 2.0 and/or USB 3.0 ports.				
4.21	Device must be certified IEC 60529 for intrusion protection (IP) of IP54 or better without the use of a third party enclosure. IEC test certification must be on record with the LA-RICS Authority.	✗			
4.22	Device must be certified IEC 60529 for IP66 or better without the use of a third-party enclosure. IEC test certification must be on record with the LA-RICS Authority. Specify your minimum and maximum battery life during idle and working conditions including charging time.				
4.23	Power accessories: All necessary parts for powering device including AC/DC power adapter brick and cord for 100-240 VAC, 50-60Hz power source.	X			



**APPENDIX A  
SOQ FORM 3.4**

*RFSQ NO. LA-RICS 010*

*Amended and Restated in Addendum B*

Reference No.	Tablet Requirements	Device Mandatory Minimum Qualifications (X = Yes)	Vendor's Device Compliant? <small>(Vendor shall mark column with X)</small>		Vendor Comments
			Yes	No	
4.24	Connector accessory: A locking mechanism for connectors – USB and RJ-45.				
4.25	Identify and recommend accessories that work with and support of the unit such as <ul style="list-style-type: none"> <li>1.) AC/DC power charger</li> <li>2.) Replacement Batteries</li> <li>3.) External cases</li> <li>4.) Screen protection</li> <li>5.) External keyboard</li> <li>6.) External monitor</li> <li>7.) USB cords</li> <li>8.) Passive cradle</li> <li>9.) Port adapter cradle</li> <li>10.) External antenna adapter</li> <li>11.) Wired head phones</li> <li>12.) Bluetooth headphones</li> </ul>				
4.25	Warranty and any offerings for extended warranties for the device must be on record with the LA-RICS Authority.				
4.26	Identify the Memory configuration and the processor used in the device. LA-RICS would prefer to have 128 GB memory with 4GB RAM available on the tablet device				
<b>Wi-Fi and Bluetooth</b>					
4.27	Device supports Wi-Fi station (STA) protocol IEEE 802.11b/g/n in the 2.4GHz band.	X			
4.28	Device supports Wi-Fi station (STA) protocol IEEE 802.11b/g/n with operations in both 2.4 and 5.8 GHz bands.	X			
4.29	Device supports Wi-Fi offload and may or may not support session persistence.				

**APPENDIX A**  
**SOQ FORM 3.4**

*RFSQ NO. LA-RICS 010*

*Amended and Restated in Addendum B*

Reference No.	Tablet Requirements	Device Mandatory Minimum Qualifications (X = Yes)	Vendor's Device Compliant? (Vendor shall mark column with X)		Vendor Comments
			Yes	No	
4.30	EIRP of device exceeds 17 dBm with supported MIMO configuration	X			
4.31	EIRP of device exceeds 24 dBm with supported MIMO configuration.				
4.32	The device supports Wi-Fi Access Point (STA) protocol IEEE 802.11a in the 4.9 GHz band.				
4.33	Device supports Wi-Fi station (AP) protocol IEEE 802.11b/g/n with operations in dual bands, 2.4 and 5.8 GHz.				
4.34	EIRP of device exceeds 17 dBm with supported MIMO configuration.				
4.35	EIRP of device exceeds 24 dBm with supported MIMO configuration.				
4.36	The device supports Wi-Fi Access Point (AP) protocol IEEE 802.11a in the 4.9 GHz band.				
4.37	The device may support Wi-Fi Station (STA) protocol IEEE 802.11a in the 4.9 GHz band.				
4.38	The device supports WPA2-Enterprise.				
4.39	If the device has WPS capability, it must support disabling that feature.	X			
4.40	The device supports at least one SSID.				
4.41	The device supports multiple SSIDs.				
4.42	The device is capable of non-broadcast or hidden SSIDs.				
4.43	The device supports Bluetooth 4.0 or higher.				
<b>GPS</b>					
4.44	The device supports autonomous (standalone) 3-channel, or higher GPS solution.				

**APPENDIX A**  
**SOQ FORM 3.4**

RFSQ NO. LA-RICS 010

Amended and Restated in Addendum B

Reference No.	Tablet Requirements	Device Mandatory Minimum Qualifications (X = Yes)	Vendor's Device Compliant? (Vendor shall mark column with X)		Vendor Comments
			Yes	No	
4.45	The device supports autonomous (standalone) 3-channel, or higher GPS solution and at least one other satellite system (e.g. GLONASS).	X			
4.46	The device supports autonomous 12-channel, or higher GPS and GPS augmentation (WAAS).				
4.47	The device support autonomous GPS (USA GPS) and at least one other satellite system (e.g., Galileo, European GPS) and GPS augmentation				
4.48	The GPS position is refreshed at a rate of 5 Hz or faster.				
4.49	The GPS position is refreshed rate of 1 Hz or faster.				
<b>Device Management</b>					
4.50	The device policies are settable via OMA-DM 1.2v (or higher) compliant managers.	✘			
4.51	Device supports LA-RICS certified extensions to the OMA DM Management Information Bases (MIBs).				
4.52	The device provisioning may be settable via vendor's proprietary Web-based management.				
<b>Applications</b>					
4.53	Device is compatible and tested with NetMotion's Locality software.				
4.54	An LTE performance application is supported by the device supplier				
4.55	Vendor supported push-to-talk (PTT) device client is managed by OMA-DM 1.2v compliant server.				
4.56	Vendor supported Automatic Vehicular Location (AVL) device client. Management may be via OMA-DM 1.2v, or Web based.				
4.57	Vendor supported weather client.				
4.58	Vendor supported Internet Browser.				

**APPENDIX A  
SOQ FORM 3.4**

*RFSQ NO. LA-RICS 010*

*Amended and Restated in Addendum B*

Reference No.	Tablet Requirements	Device Mandatory Minimum Qualifications (X = Yes)	Vendor's Device Compliant? (Vendor shall mark column with X)		Vendor Comments
			Yes	No	
4.59	Vendor supported VoIP application (SIP based).				
4.60	Vendor supported Messaging (SMS and MMS).				
4.61	Vendor supported CMAS client.				
4.62	Vendor supported email client.				
4.63	Vendor to identify the common business enterprise software that is supported on the device (i.e. Microsoft Office Suite, Adobe, etc.).				
<b>UE Security</b>					
4.64	The device utilizes a trusted boot.	✗			
4.65	The device utilizes a hardware root of trust and trusted boot.				
4.66	The device utilizes a hardware root of trust and trusted boot, and attestation				
4.67	The UE supports Advanced Authentication (AA) as defined by CJIS security policies. Ref: <a href="http://www.fbi.gov/about-us/cjis/RequirementsDocument.pdf">http://www.fbi.gov/about-us/cjis/RequirementsDocument.pdf</a>				
4.68	The device is FIPS 140-2 security class level 1 certified by an accredited Cryptographic Module Testing laboratory. Test certification must be on record with the LA-RICS Authority.				
4.69	The device must meet FIPS 140-2 security class level 2 certified by an accredited Cryptographic Module Testing laboratory. Test certification must be on record with the LA-RICS Authority.				
<b>UI Interface</b>					
4.70	Device includes an integral speaker(s) that is louder than customary in consumer devices. Decibels to be defined.				
4.71	Device uses noise cancellation technology.				
4.72	User interface (UI) display is designed for outdoor use with brighter screen than found on consumer devices.				
4.73	Device touchscreen operates successfully with gloves on.				

**APPENDIX A  
SOQ FORM 3.4**

*RFSQ NO. LA-RICS 010*

*Amended and Restated in Addendum B*

Reference No.	Tablet Requirements	Device Mandatory Minimum Qualifications (X = Yes)	Vendor's Device Compliant? (Vendor shall mark column with X)		Vendor Comments
			Yes	No	
4.74	Vendor to identify other user interfaces that are offered and supported on the tablet. LA-RICS would prefer that the tablet device support a digitized pen with “click” button features and the ability to write on the device instantly on most software programs and documents.				
<b>Certification</b> <sup>Note 1</sup>					
4.75	Device must be FCC Part 90 certified. Test certification must be on record with the LA-RICS Authority.	X			
4.76	Device must be FCC Part 15 certified. Test certification must be on record with the LA-RICS Authority.	X			
4.77	Device is PTCRB certified for Band 14 operations. Test certification must be on record with the LA-RICS Authority.	X			
4.78	Device is certified for operation on the alternate carriers to be used in the operation of the device. Test certification must be on record with the LA-RICS Authority.	X			
4.79	Device must be IOT certified with Ericsson RAN. The IOT test plan will be consistent with published CTIA Certification Test Plans. The expectation is that the tests should be executed by a CTIA Authorized Test Lab. <b>Specific test suites to be provided by LARICS.</b>  Normative Reference: <a href="http://www.ctia.org/policy-initiatives/wireless-device-certification/certification-test-plans">http://www.ctia.org/policy-initiatives/wireless-device-certification/certification-test-plans</a>	X			

Reference No.	Tablet Requirements	Device Mandatory Minimum Qualifications (X = Yes)	Vendor's Device Compliant? (Vendor shall mark column with X)		Vendor Comments
			Yes	No	
4.80	Device must be <del>certified to be</del> interoperable with the Mformation device management system. Test cases will be consistent with Interoperability test cases in the OMA document: “Enabler Test Specification for Device Management”, Jan 2008 Normative reference: <a href="http://technical.openmobilealliance.org/Technical/Release_Program/docs/ETS/OMA-ETS-DM-V1_2-20110128-C.pdf">http://technical.openmobilealliance.org/Technical/Release_Program/docs/ETS/OMA-ETS-DM-V1_2-20110128-C.pdf</a>	X			
4.81	Device must be <i>conformance</i> tested on the LA-RICS network by the vendor under the observation and approval of LA-RICS personnel or its agents. The base conformance test plan will follow CTIA’s, “Certification Program Test Plan”, see link below. The detailed step-by-step IOT plan will be developed by the vendor, then reviewed and approved by LA-RICS. Normative Reference: <a href="http://www.ctia.org/docs/default-source/default-document-library/ctia-test-plan-for-lte-interoperability.pdf?sfvrsn=0">http://www.ctia.org/docs/default-source/default-document-library/ctia-test-plan-for-lte-interoperability.pdf?sfvrsn=0</a>	X			
4.82	Device must be <i>acceptance</i> tested by LA-RICS. Test plan may be based upon all processes from device ordering through drive tests on the LA-RICS network. The purpose of the tests is to operationalize the device and ensure a good quality user experience.	X			

Note:

- 1.) As part of LA-RICS acceptance testing (post-PTCRB certification) should test with included antenna(s) supplied with device as applicable.

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**PSBN DEVICE CATEGORIES COMPLIANCE MATRIX**

**CATEGORY 5 – OUTDOOR UNITS (ODU)**

Description	Device Form Factor	Use
Fixed outdoor LTE CPE (ODU). Ethernet cable is used to connect users to the ODU.	Outdoor device typically small profile • e.g. 4.7 x 8.5 x 2.6 inches.	Fixed to an exterior wall of a building providing LTE connectivity for one or more computers inside the building. Optimal placement and high-gain antennae provides superior performance.

**VENDOR NAME:** \_\_\_\_\_

**DEVICE NAME:** \_\_\_\_\_

**DEVICE MODEL:** \_\_\_\_\_

**DEVICE VERSION:** \_\_\_\_\_

**APPENDIX A**  
**SOQ FORM 3.5**

RFSQ NO. LA-RICS 010

Amended and Restated in Addendum B

Reference No.	Outdoor Units Requirements	Device Mandatory Minimum Qualifications (X = Yes)	Vendor's Device Compliant? (Vendor shall mark column with X)		Vendor Comments
			YES	No	
<b>LTE RF Elements</b>					
5.1	Device supports Band Class 14 (BC14_UE).	X			
5.2	Device is a Power Class 3 UE.	X			
5.3	BC14_UE is a 3GPP Category 3 or 4 device.				
5.4	High-gain Antenna kit is supplied (unless antennae are internal).				
5.5	Provide installation documentation and training for 3 <sup>rd</sup> party installation vendors.	✘			
<b>UE Characteristics</b>					
5.6	Device supports interworking with the USIM/USAT applications in the UICC per 3GPP 31.101, 31.102 and 31.111.	X			
5.7	Device is fully compliant with all FCC Technical Advisory Board minimum requirements. Ref: <a href="http://apps.fcc.gov/ecfs/document/view?id=7021919873">http://apps.fcc.gov/ecfs/document/view?id=7021919873</a>	X			
5.8	Device meets operational conditions of ambient temperature of 0 to 130 degrees Fahrenheit. MIL SPEC 810G. Test certification must be on record with the LA-RICS Authority.	✘			
5.9	Device meets operational ambient conditions of temperature of -22 to 140 degrees Fahrenheit or better. MIL SPEC 810G. Test certification must be on record with the LA-RICS Authority.				
5.10	Device has Ethernet RJ-45 ports (10/100/1000).	X			
5.11	Power to the ODU is provided using over Power over Ethernet (PoE). All necessary accessories are provided to support this functionality.	X			
5.12	Warranty and any offerings for extended warranties for the device must be on record with the LA-RICS Authority.	X			
<b>eUICC Management</b>					
5.13	If the ODU only uses an eUICC or embedded SIM then the UICC specifications apply for this device.	X			
<b>Certification</b> <small>Note 1, 2</small>					



Reference No.	Outdoor Units Requirements	Device Mandatory Minimum Qualifications (X = Yes)	Vendor's Device Compliant? (Vendor shall mark column with X)		Vendor Comments
			YES	No	
5.14	Device must be FCC Part 90 certified. Test certification must be on record with the LA-RICS Authority.	X			
5.15	Device is PTCRB certified for Band 14 operations. Test certification must be on record with the LA-RICS Authority.	X			
5.16	Device is certified for operation on the alternate carriers to be used in the operation of the device. Test certification must be on record with the LA-RICS Authority. Identify each carrier supported.	✘			
5.17	Device must be IOT certified with Ericsson RAN. The IOT test plan will be consistent with published CTIA Certification Test Plans. The expectation is that the tests should be executed by a CTIA Authorized Test Lab. <b>Specific test suites to be provided by LARICS.</b>  Normative Reference: <a href="http://www.ctia.org/policy-initiatives/wireless-device-certification/certification-test-plans">http://www.ctia.org/policy-initiatives/wireless-device-certification/certification-test-plans</a>	X			
5.18	Device must be <i>conformance</i> tested on the LA-RICS network by the vendor under the observation and approval of LA-RICS personnel or its agents. The base conformance test plan will follow CTIA's, "Certification Program Test Plan", see link below. The detailed step-by-step IOT plan will be developed by the vendor, then reviewed and approved by LA-RICS.  Normative Reference: <a href="http://www.ctia.org/docs/default-source/default-document-library/ctia-test-plan-for-lte-interoperability.pdf?sfvrsn=0">http://www.ctia.org/docs/default-source/default-document-library/ctia-test-plan-for-lte-interoperability.pdf?sfvrsn=0</a>	X			
5.19	Device must be <i>acceptance</i> tested by LA-RICS. Test plan may be based upon all processes from device ordering through drive tests on the LA-RICS network. The purpose of the tests is to operationalize the device and ensure a good quality user experience.				

- Note:
- 1.) As part of LA-RICS acceptance testing (post-PTCRB certification) should test with included antenna(s) supplied with device as applicable
  - 2.) If a certified mPCI modem is utilized within the device, then the modem certification will carry over to the next higher assembly.

## PSBN DEVICE CATEGORIES COMPLIANCE MATRIX

### CATEGORY 6 – PORTABLE HOTSPOTS

Description	Device Form Factor	Use
Portable Hotspot with single or multiple LTE modems with Wi-Fi and micro-USB connectivity.	<ul style="list-style-type: none"> <li>• Typical: 4.05 x 2.88 x 0.34 inches. 4.26 ounces or other suitable dimensions based on manufacture design.</li> <li>• Multiple USB port access</li> <li>• AC/DC Power adapter</li> <li>• Battery</li> <li>• UICC slot</li> </ul>	Allows the sharing of a device's LTE data connection with other devices on the same network.

**VENDOR NAME:** \_\_\_\_\_

**DEVICE NAME:** \_\_\_\_\_

**DEVICE MODEL:** \_\_\_\_\_

**DEVICE VERSION:** \_\_\_\_\_

**APPENDIX A**  
**SOQ FORM 3.6**

*RFSQ NO. LA-RICS 010*

*Amended and Restated in Addendum B*

Reference No.	Portable Hotspot Requirements	Device Mandatory Minimum Qualifications (X = Yes)	Vendor's Device Compliant? (Vendor shall mark column with X)		Vendor Comments
			YES	NO	
<b>LTE RF Elements</b>					
6.1	Device must support Band Class 14 (BC14_UE).	X			
6.2	Device is a Power Class 3 UE.	X			
6.3	BC14_UE is a 3GPP Category 3 or 4 device.				
6.4	BC14_UE has external antennae ports to allow for vehicle rooftop mounting of antennae for all functions – MIMO LTE, Wi-Fi and GPS.				
6.5	Device simultaneously supports B14 and one commercial wireless carrier operations. Identify each carrier supported.				
6.6	Device can simultaneously support B14 and two or more commercial wireless carrier operations (desired). Identify each carrier supported.				
6.7	Device is supplied with Antenna Kit, cables, and other associated parts to complete installation of the device in a vehicle: motorcycle, car, SUV or truck as specified by agency.				
6.8	Provide installation documentation and training for 3 <sup>rd</sup> party installation vendors.				
<b>UE Characteristics</b>					
6.9	UICC(s) can be installed in the device in the field without voiding its warranty.	✗			
6.10	There is a unique UICC for each mobile service provider (LTE band) supported in the device.				
6.11	Device supports interworking with the USIM/USAT applications in the UICC per 3GPP 31.101, 31.102 and 31.111.	X			
6.12	Device is fully compliant with all FCC Technical Advisory Board minimum requirements. Ref: <a href="http://apps.fcc.gov/ecfs/document/view?id=7021919873">http://apps.fcc.gov/ecfs/document/view?id=7021919873</a>	X			

Reference No.	Portable Hotspot Requirements	Device Mandatory Minimum Qualifications (X = Yes)	Vendor's Device Compliant? (Vendor shall mark column with X)		Vendor Comments
			YES	NO	
6.13	Device meets operational conditions of ambient temperature of 0 to 130 degrees Fahrenheit. MIL SPEC 810G. Test certification must be on record with the LA-RICS Authority.	X			
6.14	Device meets operational ambient conditions of temperature of -22 to 140 degrees Fahrenheit or better. MIL SPEC 810G. Test certification must be on record with the LA-RICS Authority.				
6.15	Device operational ambient temperature of -22 to 170 degrees Fahrenheit or better is desired. Test certification must be on record with the LA-RICS Authority.				
6.16	Device must pass shock resistant to 90 cm drop on any of six sides. MIL SPEC 810. Test certification must be on record with the LA-RICS Authority.	X			
6.17	Device must be certified vibration resistant for light truck transportation model using MIL STD-810G, or equivalent. Test certification must be on record with the LA-RICS Authority.	X			
6.18	Device has at least one Ethernet RJ-45 port (10/100/1000).				
6.19	Device has one or more microUSB 2.0 ports.	X			
6.20	Device has one or more microUSB 3.0 ports.				
6.21	Device must be certified IEC 60529 or equivalent for intrusion protection (IP) of IP54 or better without the use of a third party enclosure. IEC test certification must be on record with the LA-RICS Authority.	X			
6.22	Device must be certified IEC 60529 or equivalent for IP66 or better without the use of a third-party enclosure. IEC test certification must be on record with the LA-RICS Authority				
6.23	Battery designed to operate unit longer than 10 hours on a single charge.				
6.24	Power accessories: All cords and components necessary to power portable hotspot via standard 110-120v AC receptacle.	X			

Reference No.	Portable Hotspot Requirements	Device Mandatory Minimum Qualifications (X = Yes)	Vendor's Device Compliant? (Vendor shall mark column with X)		Vendor Comments
			YES	NO	
6.25	Removable battery designed to operate greater than 10 hours on a single charge; plus spare battery and external battery charger.				
6.26	Power accessories: All necessary parts including, but not limited to connectors and harnesses to power the portable hotspot via a nominal 10 - 30 VDC power source (e.g. vehicle battery) are supplied with the unit. As well as replacement batteries				
6.27	Warranty and any offerings for extended warranties for the device must be on record with the LA-RICS Authority.	X			
<b>Motorcycle Specific UE Requirements</b>					
6.28	Device is certified vibration resistant for motorcycle transportation model using MIL STD-810G, or equivalent. Test certification must be on record with the LA-RICS Authority.	✗			
6.29	Device has a small profile suitable for mounting on a motorcycle.	✗			
6.30	Device accessories necessary for mounting on a motorcycle including power cabling, antennae, and miscellaneous hardware.	✗			
<b>Wi-Fi and Bluetooth</b>					
6.31	Device supports Wi-Fi station (AP) protocol IEEE 802.11b/g/n in 2.4 GHz band	X			
6.32	Device supports Wi-Fi station (AP) protocol IEEE 802.11b/g/n with operations in dual bands, 2.4 and 5.8 GHz.				
6.33	EIRP of device exceeds 17 dBm with supported MIMO configuration				
6.34	EIRP of device exceeds 24 dBm with supported MIMO configuration				
6.34	The device supports WPA2-Enterprise				
6.35	If the device has WPS capability, it must support disabling that feature.	X			
6.36	The device supports at least one SSID	X			
6.37	The device supports multiple SSIDs				

Reference No.	Portable Hotspot Requirements	Device Mandatory Minimum Qualifications (X = Yes)	Vendor's Device Compliant? (Vendor shall mark column with X)		Vendor Comments
			YES	NO	
6.38	The device is capable of non-broadcast or hidden SSIDs.				
6.39	The device supports Bluetooth 4.0 or higher.				
<b>GPS</b>					
6.40	The device supports autonomous (standalone) 3-channel, or higher GPS solution.				
6.41	The device supports autonomous (standalone) 3-channel, or higher GPS solution and at least one other satellite system (e.g. GLONASS).				
<b>UE Security</b>					
6.42	Device is able to support VPN data flows	X			
<b>UI Interface</b>					
6.43	User interface (UI) display is designed for outdoor use with brighter screen or display than found on typical consumer devices.				
6.44	Device touchscreen operates successfully with gloves on.				
<b>Certification</b>					
6.45	Device must be FCC Part 90 certified. Test certification must be on record with the LA-RICS Authority.	X			
6.46	Device must be FCC Part 15 certified. Test certification must be on record with the LA-RICS Authority.	X			
6.47	Device is PTCRB certified for Band 14 operations. Test certification must be on record with the LA-RICS Authority.	X			
6.48	Device is certified for operation on the alternate carriers to be used in the operation of the device. Test certification must be on record with the LA-RICS Authority.	<del>X</del>			

Reference No.	Portable Hotspot Requirements	Device Mandatory Minimum Qualifications (X = Yes)	Vendor's Device Compliant? (Vendor shall mark column with X)		Vendor Comments
			YES	NO	
6.49	<p>Device must be IOT certified with Ericsson RAN. The IOT test plan will be consistent with published CTIA Certification Test Plans. The expectation is that the tests should be executed by a CTIA Authorized Test Lab. <b>Specific test suites to be provided by LARICS.</b></p> <p>Normative Reference: <a href="http://www.ctia.org/policy-initiatives/wireless-device-certification/certification-test-plans">http://www.ctia.org/policy-initiatives/wireless-device-certification/certification-test-plans</a></p>	X			
6.50	<p>Device must be <del>certified to be</del> interoperable with the Motorola device management system.</p> <p>Test cases will be consistent with Interoperability test cases in the OMA document: "Enabler Test Specification for Device Management", Jan 2008</p> <p>Normative reference: <a href="http://technical.openmobilealliance.org/Technical/Release_Program/docs/ETS/OMA-ETS-DM-V1_2-20110128-C.pdf">http://technical.openmobilealliance.org/Technical/Release_Program/docs/ETS/OMA-ETS-DM-V1_2-20110128-C.pdf</a></p>	X			
6.51	<p>Device must be <i>conformance</i> tested on the LA-RICS network by the vendor under the observation and approval of LA-RICS personnel or its agents. The base conformance test plan will follow CTIA's, "Certification Program Test Plan", see link below. The detailed step-by-step IOT plan will be developed by the vendor, then reviewed and approved by LA-RICS.</p> <p>Normative Reference: <a href="http://www.ctia.org/docs/default-source/default-document-library/ctia-test-plan-for-lte-interoperability.pdf?sfvrsn=0">http://www.ctia.org/docs/default-source/default-document-library/ctia-test-plan-for-lte-interoperability.pdf?sfvrsn=0</a></p>	X			
6.52	<p>Device must be <i>acceptance</i> tested by LA-RICS. Test plan may be based upon all processes from device ordering through drive tests on the LA-RICS network. The purpose of the tests is to operationalize the device and ensure a good quality user experience.</p>	X			

**PSBN DEVICE CATEGORIES COMPLIANCE MATRIX**

**CATEGORY 7 – mPCIe LTE MODEMS**

Description	Device Form Factor	Use	Special Note
LTE modem that provides the LTE radio connectivity for devices.	mPCIe (Full mini F1) 2.0 x 1.18 x 0.2 inches	Embedded in laptops (MDTs), tablets, and routers (esp. mounted in vehicles) to provide LTE connectivity.	The modem requires a UICC.

**VENDOR NAME:** \_\_\_\_\_

**DEVICE NAME:** \_\_\_\_\_

**DEVICE MODEL:** \_\_\_\_\_

**DEVICE VERSION:** \_\_\_\_\_



**APPENDIX A  
SOQ FORM 3.7**

*RFSQ NO. LA-RICS 010*

*Amended and Restated in Addendum B*

Reference No.	mPCIe LTE Modem Requirements	Device Mandatory Minimum Qualifications (X = Yes)	Vendor's Device Compliant? (Vendor shall mark column with X)		Vendor Comments
			YES	No	
<b>LTE RF Elements</b>					
7.1	Device supports Band Class 14 (BC14_UE).	X			
7.2	Device is a Power Class 3 UE.	X			
7.3	BC14_UE is a 3GPP Category 3 or 4 device.	X			
7.4	BC14_UE has external antenna ports	X			
7.5	Device simultaneously supports B14 and one commercial wireless carrier operations. Identify each carrier supported.	X			
7.6a	Device simultaneously supports B14 and two or more commercial wireless carrier operations. Identify each carrier supported.				
7.6b	Device can simultaneously support two commercial wireless carriers. Identify each carrier supported.				
<b>UE Characteristics</b>					
7.7	Device supports interworking with the USIM/USAT applications in the UICC per 3GPP 31.101, 31.102 and 31.111.	X			
7.8	Device is fully compliant with all FCC Technical Advisory Board minimum requirements. Ref: <a href="http://apps.fcc.gov/ecfs/document/view?id=7021919873">http://apps.fcc.gov/ecfs/document/view?id=7021919873</a>	X			
7.9	Device meets operational conditions of ambient temperature of 0 to 130 degrees Fahrenheit. MIL SPEC 810G. Test certification must be on record with the LA-RICS Authority.	X			
7.10	Device meets operational ambient conditions of temperature of -22 to 170 degrees Fahrenheit or better. MIL SPEC 810G. Test certification must be on record with the LA-RICS Authority.				
7.11	Warranty and any offerings for extended warranties for the device must be on record with the LA-RICS Authority.	X			
<b>eUICC Management</b>					
7.12	If the mPCIe only uses an eUICC or embedded SIM then the UICC specifications apply for this device.	X			

Reference No.	mPCIe LTE Modem Requirements	Device Mandatory Minimum Qualifications (X = Yes)	Vendor's Device Compliant? (Vendor shall mark column with X)		Vendor Comments
			YES	No	
<b>Certification</b> <sup>Note 1</sup>					
7.13	Device must be FCC Part 90 certified. Test certification must be on record with the LA-RICS Authority.	X			
7.14	Device must be FCC Part 15 certified assuming Wi-Fi or Bluetooth functionality. Test certification must be on record with the LA-RICS Authority.	<del>X</del>			
7.15	Device is PTCRB certified for Band 14 operations. Test certification must be on record with the LA-RICS Authority.	X			
7.16	Device is certified for operation on the alternate carriers to be used in the operation of the device. Test certification must be on record with the LA-RICS Authority.	X			
7.17	Device must be IOT certified with Ericsson RAN. The IOT test plan will be consistent with published CTIA Certification Test Plans. The expectation is that the tests should be executed by a CTIA Authorized Test Lab. <b>Specific test suites to be provided by LARICS.</b>  Normative Reference: <a href="http://www.ctia.org/policy-initiatives/wireless-device-certification/certification-test-plans">http://www.ctia.org/policy-initiatives/wireless-device-certification/certification-test-plans</a>	X			
7.18	Device must be <i>conformance</i> tested on the LA-RICS network by the vendor under the observation and approval of LA-RICS personnel or its agents. The base conformance test plan will follow CTIA's, "Certification Program Test Plan", see link below. The detailed step-by-step IOT plan will be developed by the vendor, then reviewed and approved by LA-RICS. Normative Reference: <a href="http://www.ctia.org/docs/default-source/default-document-library/ctia-test-plan-for-lte-interoperability.pdf?sfvrsn=0">http://www.ctia.org/docs/default-source/default-document-library/ctia-test-plan-for-lte-interoperability.pdf?sfvrsn=0</a>	X			

Reference No.	mPCIe LTE Modem Requirements	Device Mandatory Minimum Qualifications (X = Yes)	Vendor's Device Compliant? (Vendor shall mark column with X)		Vendor Comments
			YES	No	
7.19	Device must be <i>acceptance</i> tested by LA-RICS. Test plan may be based upon all processes from device ordering through drive tests on the LA-RICS network. The purpose of the tests is to operationalize the device and ensure a good quality user experience.	X			

Note:

- 1.) As part of LA-RICS acceptance testing (post-PTCRB certification) should test with included antenna(s) supplied with device as applicable.

**PSBN DEVICE CATEGORIES COMPLIANCE MATRIX**

**CATEGORY 8 – UICC**

**VENDOR NAME:** \_\_\_\_\_

**DEVICE NAME:** \_\_\_\_\_

**DEVICE MODEL:** \_\_\_\_\_

**DEVICE VERSION:** \_\_\_\_\_

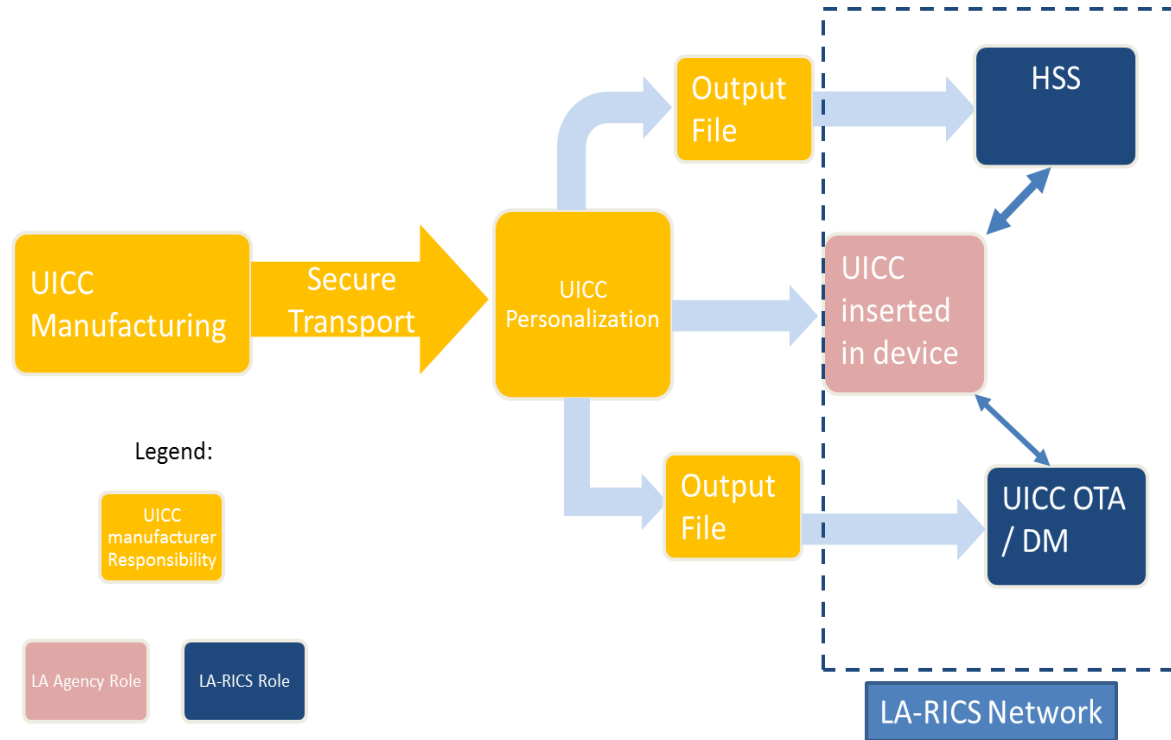
Reference No.	UICC Requirements	Device Mandatory Minimum Qualifications (X = Yes)	Vendor's Device Compliant? (Vendor shall mark column with X)		Vendor Comments
			YES	NO	
<b>Manufacturing and Ordering</b>					
8.1	The vendor shall provide Pre-order support for LA-RICS in defining file templates for UICC personalization along with agreed upon inventory card labeling with ICCID and SKU.	X			
8.2	The vendor shall provide a working UICC sample for LA-RICS acceptance.	X			
8.3	The vendor will provide order management system or method from LA-RICS for quantities of standalone UICCs.	X			
8.4	Vendor shall support standard low volume orders, such as a minimum quantity of one hundred (100) UICCs per order.	<del>X</del>			
8.5	The vendor shall provide a process for tracking and reporting LA-RICS orders, including orders based on individual UICC serial numbers.	X			
8.6	The vendor shall provide a detailed step by step ordering and delivery process.				
<b>Special Requirements</b>					
8.7	The vendor shall provide UICC components which are compliant with specification: 3GPP TS 31.101 UICC-Terminal interface; Physical and logical characteristics.	X			
8.8	The vendor shall provide UICC components which are compliant with specification: 3GPP TS 31.102 Technical Specifications Group Terminal; Characteristics of the USIM application.	X			
8.9	The vendor shall provide UICC components which are compliant with specification: 3GPP TS 31.103 Characteristics of the IP Multimedia Services Identity Module (ISIM) Application.	X			
8.10	The vendor shall provide UICC components which are compliant with specification: 3GPP TS 31.111: USIM Application Toolkit (USAT).	X			
8.11	The vendor shall provide UICC components which are compliant with specification: 3GPP TS 31.116: Remote APDU Structure for USIM Toolkit Applications.	X			

Reference No.	UICC Requirements	Device Mandatory Minimum Qualifications (X = Yes)	Vendor's Device Compliant? (Vendor shall mark column with X)		Vendor Comments
			YES	NO	
8.12	The vendor shall provide UICC components which are compliant with specification: ETSI TS 102 221 Smart Cards UICC-Terminal Interface; Physical and Logical Characteristics.	X			
8.13	The vendor shall provide UICC components which are compliant with specification: ETSI TS 102 223 Smart cards; Card Application Toolkit (CAT).	X			
<b>Security</b>					
8.14	The vendor shall possess and maintain GSMA SAS (Security Accreditation Scheme) accreditation.	X			
8.15	The vendor shall generate, store, and transport secret information in a secure environment and use secured interfaces and file formats.	X			
8.16	Proprietary and/or sensitive information, such as security and authentication keys, shall be generated and maintained in a facility which is operated within the United States.	X			
<b>Profile</b>					
8.17	The vendor shall create a UICC profile for the LA-RICS PSBN. The profile shall include application functions and file structures supported on the UICC. A preliminary profile is provided in Table 1 "Preliminary UICC attribute list".	X			
8.18	The UICC profile shall include the USIM application.	X			
8.19	The UICC profile shall include the ISIM application to support future IMS network access support.	X			
8.20	The UICC profile shall support Remote File and Application Management.	X			
<b>Form Factor</b>					
8.21	The vendor shall provide UICC components compliant with the 2FF (Mini) plug-in form factor.	X			
8.22	The vendor shall provide UICC components compliant with the 3FF (Micro) plug-in form factor.	X			

Reference No.	UICC Requirements	Device Mandatory Minimum Qualifications (X = Yes)	Vendor's Device Compliant? (Vendor shall mark column with X)		Vendor Comments
			YES	NO	
8.23	The vendor shall provide UICC components which operate across the following temperature ranges: 2FF: -40 °C to +105 °C 3FF: -25 °C to +85 °C	X			
8.24	The UICC shall support IMEI locking. IMEI locking is the ability to lock the SIM card to a specific UE.	<del>X</del>			
8.25	Each UICC shall have a unique identifier, such as a serial number. The identifier shall be printed on the card and have a corresponding bar code.	X			
8.26	The vendor shall provide UICC components which are compatible with a variety of commercial mobile operating systems, such as Windows Mobile, Linux, and Android, etc.	X			
8.27	The vendor shall specify a minimum and recommended memory in the UICC card. At a minimum two different configurations shall be provided to cater to data devices and Smartphone classes of devices.	X			
8.28	Supply voltage range shall support all 3 classes of voltage range from 1.8v to 5v.	X			
<b>Applications</b>					
8.29	UICC vendor shall provide specifications for the programming cycles, programming time and data retention time for variety of UICC SIM products offered.	X			
8.30	The vendor shall provide a list of supported applications and applets for their UICCs.	X			
<b>Provisioning</b>					
8.31	The vendor shall generate Subscriber provisioning files for LA-RICS.	X			
8.32	The vendor shall support a Subscriber provisioning file format which is compatible with the LA-RICS subscriber provisioning system.	X			
8.33	The vendor's Subscriber provisioning files shall be transmitted to LARICS using secured interfaces and encrypted formats.	X			
8.34	The vendor shall provide a secure process for entry of UICC output file with keys, etc. (i.e. K <sub>i</sub> ) into LA-RICS HSS. See Figure 1.	X			
<b>Certification</b>					

Reference No.	UICC Requirements	Device Mandatory Minimum Qualifications (X = Yes)	Vendor's Device Compliant? (Vendor shall mark column with X)		Vendor Comments
			YES	NO	
8.35	The vendor shall provide certification of compatibility and operability with LA-RICS User Devices and the LA-RICS network.	<del>X</del>			
8.36	The vendor will provide GSMS SAS-certified manufacturing and personalization of ordered UICCs, based upon LA-RICS personalization template and customer order entry information.	X			
<b>End State</b>					
8.37	The end state is a provisioned LTE network and functional UE. Refer to Figure 1 for the conceptual process and Table 2 for SOW timeline.				





**FIGURE 1:** 1

**TABLE 1:**

Field	Value	Notes
MCC	313	
MNC	100	
MSIN	{454850000 – 454899999}	Sub-range to be provided at time of order
Operator name	“LA-RICS”	Arbitrary string no longer than 10 characters.
Operator key (OP_key)	TBD	Loaded into HSS and UICC. Exact value under
K <sub>i</sub> Key	<i>Private, created during UICC process</i>	Shared private key created during UICC manufacturing process. Resides in both HSS and UICC. Secure process required by vendor
Special Access Control Class	<ul style="list-style-type: none"> <li>• All First Responder UICCs will be programmed with AC = 14 and 13 and 12 and [0-9].</li> <li>• [0-9] is randomly assigned, as is customary today with consumer UICCs.</li> <li>• Local PS policy will determine if the AC is different for secondary responders.</li> </ul>	Emergency services Access Class.
PIN / PUK	4-digits / 8-digits	Personal Identification Number (PIN) and PIN Unlocking Key (PUK) Value
Device Manager APN	mgmt.losangco.ca.apn.epc. mnc100.mcc313.3gppnetwork.org	
Local APN	publicsafety.losang.ca.apn.epc. mnc100.mcc313.3gppnetwork.org	
Diameter Realm	losangco.ca.epc.	
Form Factors	{2FF, 3FF}	Derived from device specified.

**TABLE 2 – SOW:**

No.	Deliverable	Date
1	Vendor UICC Specification Document	2 weeks from start date
2	<ul style="list-style-type: none"> <li>• Pre-order support with LA-RICS:</li> <li>• UICC personalization template</li> <li>• Inventory plan: UICC marking plan with ICCID and SKU</li> <li>• Working UICC sample for LA-RICS acceptance tests</li> </ul>	4 weeks from start date
3	UICC working samples	6 weeks from start date
4	Order management and delivery process with LA-RICS for quantities of standalone UICCs.	6 weeks from start date
5	Secure process for entry of UICC output file with keys, etc. (i.e. Ki) into LA-RICS HSS.	8 weeks from start date
6	Secure process for entry of UICC output file into UICC OTA device management system.	8 weeks from start date
7	Certification Test Plan and Execution	8 weeks from start date
8	Commence Production	12 weeks from start date

## PSBN DEVICE CATEGORIES COMPLIANCE MATRIX

### CATEGORY 9 – ROUTERS

Description	Device Form Factor	Use
Router with multiple modems, including at least Band Class 14, and additional options such as Ethernet, USB and Wi-Fi connectivity.	<ul style="list-style-type: none"><li>• Typical: 5.5 x 6.0 x 1.9 inches. Or other sizes to meet specific use cases</li><li>• Mountable</li><li>• External ports for Ethernet connectivity</li></ul>	<p>Provide wired or wireless data session connectivity.</p> <ul style="list-style-type: none"><li>• Primary use is for internal first responder systems and applications to access the B14 LTE system or secondary LTE carrier Example of usage: Connect surveillance cameras, connect public safety offices to Band 14, and connect sensor networks or other machine to machine (M2M) configurations.</li></ul>

**VENDOR NAME:** \_\_\_\_\_

**DEVICE NAME:** \_\_\_\_\_

**DEVICE MODEL:** \_\_\_\_\_

**DEVICE VERSION:** \_\_\_\_\_

Reference No.	Router Requirements	Device Mandatory Minimum Qualifications (X = Yes)	Vendor's Device Compliant? (Vendor shall mark column with X)		Vendor Comments
			YES	NO	
<b>LTE RF Elements</b>					
1.1	Device must support Band Class 14 (BC14_UE).	X			
1.2	Device is a Power Class 3 UE.	X			
1.3	BC14_UE is a 3GPP Category 3 or 4 device.				
1.4	BC14_UE has external antenna ports to allow for vehicle rooftop mounting of antenna for all functions – MIMO LTE, Wi-Fi and GPS.				
1.5a	Device simultaneously supports B14 and one commercial wireless carrier operations.				
1.5b	Device can simultaneously support two commercial carriers. Identify each carrier supported.				
1.6	Device can simultaneously support B14 and two or more commercial wireless carrier operations (desired). Identify each carrier supported.				
1.7	Device is supplied with Antenna Kit, cables, and other associated parts to complete installation of the device in a vehicle: motorcycle, car, SUV or truck as specified by agency.	X			
<b>UE Characteristics</b>					
1.8	LTE modem(s) can be installed in the device in the field without voiding its warranty				
1.9	UICC(s) can be installed in the device in the field without voiding its warranty	X			
1.10	There is a unique UICC for each mobile service provider (LTE band) supported in the device.				
1.11	Device supports interworking with the USIM/USAT applications in the UICC per 3GPP 31.101, 31.102 and 31.111.	X			

Reference No.	Router Requirements	Device Mandatory Minimum Qualifications (X = Yes)	Vendor's Device Compliant? (Vendor shall mark column with X)		Vendor Comments
			YES	NO	
1.12	Device is fully compliant with all FCC Technical Advisory Board minimum requirements. Ref: <a href="http://apps.fcc.gov/ecfs/document/view?id=7021919873">http://apps.fcc.gov/ecfs/document/view?id=7021919873</a>	X			
1.13	Device meets operational conditions of ambient temperature of 0 to 130 degrees Fahrenheit under MIL SPEC 810G. Test data or certification must be on record with the LA-RICS Authority.	X			
1.14	Device meets operational ambient conditions of temperature of -22 to 140 degrees Fahrenheit or better. MIL SPEC 810G. Test certification must be on record with the LA-RICS Authority.				
1.15	Device operational ambient temperature of -22 to 170 degrees Fahrenheit or better is desired. Test certification must be on record with the LA-RICS Authority.				
1.16	Device must pass shock resistant to 90 cm drop on any of six sides under MIL SPEC 810. Test data or certification must be on record with the LA-RICS Authority.				
1.17	Device has at least one Ethernet RJ-45 port (10/100/1000).	X			
1.18	Device has two or more Ethernet RJ-45 ports (10/100/1000).				
1.19	Device has one or more USB 2.0 ports.				
1.20	Device has one or more USB 3.0 ports.				
1.21	Device supports an OBD- II interface.				
1.22	Device supports HDOBD interface.				
1.23	Device must meet IEC 60529 or equivalent for intrusion protection (IP) of IP54 or better without the use of a third party enclosure. IEC test data or certification must be on record with the LA-RICS Authority.				
1.24	Device must meet IEC 60529 or equivalent for IP66 or better without the use of a third-party enclosure. IEC test data or certification must be on record with the LA-RICS Authority				

Reference No.	Router Requirements	Device Mandatory Minimum Qualifications (X = Yes)	Vendor's Device Compliant? (Vendor shall mark column with X)		Vendor Comments
			YES	NO	
1.25	Installation kit, mounting hardware and instructions required to maintain UL and other applicable safety certification(s).				
1.26	Power accessories: All necessary parts including, but not limited to connectors and harnesses to power the vendor's router via a nominal 10 - 30 VDC power source (e.g. vehicle battery).	X			
1.27	Antenna provided for LTE operations across all supported bands with 3G fallback, 15 ft (or similar) antenna cabling with connectors.				
1.28	GPS antenna available (specify connector)				
1.29	Wi-Fi antenna available (specify connector)				
1.30	7-foot Ethernet cable available as an option or procured separately				
1.31	Connector accessory: A locking mechanism for connectors to solidly fasten USB to device.				
1.32	Warranty and any offerings for extended warranties for the device must be on record with the LA-RICS Authority.	X			
1.33	Provide installation documentation.				
<b>Motorcycle Specific UE Requirements</b>					
1.34	Device is certified vibration resistant for motorcycle transportation model using MIL STD-810G, or equivalent. Test certification must be on record with the LA-RICS Authority.				
1.35	Device has a small profile suitable for mounting on a motorcycle.				
1.36	Device accessories necessary for mounting on a motorcycle including power cabling, antenna, and miscellaneous hardware.				
<b>Wi-Fi and Bluetooth</b>					
1.37	Device supports Wi-Fi station (STA) protocol IEEE 802.11b/g/n in the 2.4GHz band.				

Reference No.	Router Requirements	Device Mandatory Minimum Qualifications (X = Yes)	Vendor's Device Compliant? (Vendor shall mark column with X)		Vendor Comments
			YES	NO	
1.38	Device supports Wi-Fi station (STA) protocol IEEE 802.11b/g/n with operations in both 2.4 and 5.8 GHz bands.				
1.39	UE supports Wi-Fi offload and may or may not support session persistence.				
1.40	EIRP of device exceeds 17 dBm with supported MIMO configuration				
1.41	EIRP of device exceeds 24 dBm with supported MIMO configuration				
1.42	The device supports Wi-Fi Access Point (STA) protocol IEEE 802.11a in the 4.9 GHz band.				
1.43	Device supports Wi-Fi station (AP) protocol IEEE 802.11b/g/n with operations in dual bands, 2.4 and 5.8 GHz.				
1.44	EIRP of device exceeds 17 dBm with supported MIMO configuration				
1.45	EIRP of device exceeds 24 dBm with supported MIMO configuration				
1.46	The device supports Wi-Fi Access Point (AP) protocol IEEE 802.11a in the 4.9 GHz band.				
1.47	The device may support Wi-Fi Station (STA) protocol IEEE 802.11a in the 4.9 GHz band.				
1.48	The device supports WPA2-Enterprise				
1.49	If the device has WPS capability, it must support disabling that feature.	X			
1.50	The device supports at least one SSID.				
1.51	The device supports multiple SSIDs.				
1.52	The device is capable of non-broadcast or hidden SSIDs.				
1.53	The device supports Bluetooth 4.0 or higher.				



Reference No.	Router Requirements	Device Mandatory Minimum Qualifications (X = Yes)	Vendor's Device Compliant? (Vendor shall mark column with X)		Vendor Comments
			YES	NO	
1.54	The device supports the IEEE 802.11s mesh networking amendment to the IEEE 802.11 specification.				
<b>GPS</b>					
1.55	The device supports autonomous (standalone) 3-channel, or higher GPS solution.				
1.56	The device supports autonomous (standalone) 3-channel, or higher GPS solution and at least one other satellite system (e.g. GLONASS).				
1.57	The device supports autonomous 12-channel, or higher GPS and GPS augmentation (WAAS).				
1.58	The device support autonomous GPS (USA GPS) and at least one other satellite system (e.g., Galileo, European GPS) and GPS augmentation.				
1.59	The GPS position is refreshed at a rate of 5 Hz or faster.				
1.60	The GPS position is refreshed rate of 1 Hz or faster.				
<b>Device Management</b>					
1.61	The device policies are settable via OMA-DM 1.2v (or higher) compliant managers.				
1.62	The device provisioning and management is available via vendor's proprietary Web-based management platform.				
<b>Applications</b>					
1.63	Device is compatible and tested with NetMotion's Locality software.				
1.64	An LTE performance application is supported by the device supplier				

Reference No.	Router Requirements	Device Mandatory Minimum Qualifications (X = Yes)	Vendor's Device Compliant? (Vendor shall mark column with X)		Vendor Comments
			YES	NO	
1.65	Vendor supported Automatic Vehicular Location (AVL) device client.  Management may be via OMA-DM 1.2v or Web based.				
<b>UE Security</b>					
1.66	The UE supports Advanced Authentication (AA) as defined by CJIS security policies. Ref: <a href="http://www.fbi.gov/about-us/cjis/RequirementsDocument.pdf">http://www.fbi.gov/about-us/cjis/RequirementsDocument.pdf</a>				
1.67	The device is FIPS 140-2 security class level 1 certified by an accredited Cryptographic Module Testing laboratory. Test certification must be on record with the LA-RICS Authority.				
1.68	The device must meet FIPS 140-2 security class level 2 certified by an accredited Cryptographic Module Testing laboratory. Test certification must be on record with the LA-RICS Authority.				
<b>Certification</b> <small>(Note 1,2)</small>					
1.69	Device must be FCC Part 90 certified. Test certification must be on record with the LA-RICS Authority.	X			
1.70	Device must be FCC Part 15 certified. Test certification must be on record with the LA-RICS Authority.	X			
1.71	Device is PTCRB certified for Band 14 operations. Test certification must be on record with the LA-RICS Authority.	X			
1.72	Device is certified for operation on the alternate carriers to be used in the operation of the device. Test certification must be on record with the LA-RICS Authority.	X			

Reference No.	Router Requirements	Device Mandatory Minimum Qualifications (X = Yes)	Vendor's Device Compliant? (Vendor shall mark column with X)		Vendor Comments
			YES	NO	
1.73	Device must be IOT certified with Ericsson RAN. The IOT test plan will be consistent with published CTIA Certification Test Plans. The expectation is that the tests should be executed by a CTIA Authorized Test Lab. Specific test suites to be provided by LARICS. Normative Reference: <a href="http://www.ctia.org/policy-initiatives/wireless-device-certification/certification-test-plans">http://www.ctia.org/policy-initiatives/wireless-device-certification/certification-test-plans</a>	X			
1.74	Device must be interoperable with the Motorola/Mformation device management system. Test cases will be consistent with Interoperability test cases in the OMA document: "Enabler Test Specification for Device Management", Jan 2008 Normative reference: <a href="http://technical.openmobilealliance.org/Technical/Release_Program/docs/ETS/OMA-ETS-DM-V1_2-20110128-C.pdf">http://technical.openmobilealliance.org/Technical/Release_Program/docs/ETS/OMA-ETS-DM-V1_2-20110128-C.pdf</a>	X			
1.75	Device must be <i>conformance</i> tested on the LA-RICS network by the vendor under the observation and approval of LA-RICS personnel or its agents. The base conformance test plan will follow CTIA's, "Certification Program Test Plan", see link below. The detailed step-by-step IOT plan will be developed by the vendor, then reviewed and approved by LA-RICS. Normative Reference: <a href="http://www.ctia.org/docs/default-source/default-document-library/ctia-test-plan-for-lte-interoperability.pdf?sfvrsn=0">http://www.ctia.org/docs/default-source/default-document-library/ctia-test-plan-for-lte-interoperability.pdf?sfvrsn=0</a>	X			

Reference No.	Router Requirements	Device Mandatory Minimum Qualifications (X = Yes)	Vendor's Device Compliant? (Vendor shall mark column with X)		Vendor Comments
			YES	NO	
1.76	Device must be <i>acceptance</i> tested by LA-RICS. Test plan may be based upon all processes from device ordering through drive tests on the LA-RICS network. The purpose of the tests is to operationalize the device and ensure a good quality user experience.	X			

Note:

- 1.) As part of LA-RICS acceptance testing (post-PTCRB certification) should test with included antenna(s) supplied with device as applicable.
- 2.) If a certified mPCI modem is utilized within the device, then the modem certification will carry over to the next higher assembly.

## PSBN DEVICE CATEGORIES COMPLIANCE MATRIX

### CATEGORY 10 – LTE LMR RADIOS

Description	Device Form Factor	Use
LTE LMR Radio that operates on Band Class 14 as well as at least one other carriers networks.	<ul style="list-style-type: none"><li>• Typical: 5.55 x 2.97 x 0.53 inches</li><li>• Minimum 4.7 inch touch screen.</li><li>• Ports for Audio headphones</li><li>• Controls for volume, power, etc.</li><li>• Hardened Case and screen</li><li>• Speakerphone capability</li></ul>	Handheld LTE LMR Radio with Band14 capability for data and non-mission critical voice services. <ul style="list-style-type: none"><li>• Hardened for rugged use</li></ul>

**VENDOR NAME:** \_\_\_\_\_

**DEVICE NAME:** \_\_\_\_\_

**DEVICE MODEL:** \_\_\_\_\_

**DEVICE VERSION:** \_\_\_\_\_

Reference No.	LTE LMR Radio Requirements	Device Mandatory Minimum Qualifications (X = Yes)	Vendor's Device Compliant? (Vendor shall mark column with X)		Vendor Comments
			YES	NO	
<b>LTE RF Elements</b>					
3.0	Device must support Band Class 14 (BC14_UE).	X			
3.1	Device is a Power Class 3 UE.	X			
3.2	BC14_UE is a 3GPP Category 3 or 4 device.				
3.3	BC14_UE has external antenna ports to allow for vehicle rooftop mounting of antenna for all functions – MIMO LTE, Wi-Fi and GPS				
3.4	Device supports B14 and one commercial wireless carrier operations as an alternate when B14 is not available	X			
3.5a	Device can support B14 and two or more commercial wireless carrier operations as alternates when B14 is not available (desired). Identify each carrier supported.				
3.5b	Device can simultaneously support two commercial wireless carriers. Identify each carrier supported.				
3.6	Device accessories: Device is supplied with docking station, Antenna Kit, cables, and other associated parts to complete installation of the device in a vehicle: motorcycle, car, SUV or truck as specified by agency.				
<b>UE Characteristics</b>					
3.7	UICC(s) can be installed in the device in the field without voiding its warranty	X			
3.8	There is a unique UICC for each mobile service provider (LTE band) supported in the device.				
3.9	The device should be able to support virtual SIMs (multiple profiles) on a single UICC slot.				
3.10	Device supports interworking with the USIM/USAT applications in the UICC per 3GPP 31.101, 31.102 and 31.111.	X			
3.11	Device is fully compliant with all applicable FCC Technical Advisory Board minimum requirements. Ref: <a href="http://apps.fcc.gov/ecfs/document/view?id=7021919873">http://apps.fcc.gov/ecfs/document/view?id=7021919873</a>	X			

Reference No.	LTE LMR Radio Requirements	Device Mandatory Minimum Qualifications (X = Yes)	Vendor's Device Compliant? (Vendor shall mark column with X)		Vendor Comments
			YES	NO	
3.12	Device meets operational conditions of ambient temperature of 0 to 130 degrees Fahrenheit. MIL SPEC 810G. Test certification must be on record with the LA-RICS Authority.	X			
3.13	Device meets operational ambient conditions of temperature of -22 to 140 degrees Fahrenheit or better. MIL SPEC 810G. Test certification must be on record with the LA-RICS Authority.				
3.14	Device must pass MIL SPEC 810 G test for shock resistant to 90 cm drop on any of six sides. Test certification must be on record with the LA-RICS Authority.	X			
3.15	Device must be certified vibration resistant for light truck transportation model using MIL STD-810G, or equivalent. Test certification must be on record with the LA-RICS Authority.				
3.16	Device has one or more Micro-USB, USB 2.0, or USB 3.0 connector.				
3.17	Device must be certified IEC 60529 for intrusion protection (IP) of IP54 or better without the use of a third party enclosure. IEC test certification must be on record with the LA-RICS Authority.				
3.18	Device must be certified IEC 60529 for IP66 or better without the use of a third-party enclosure. IEC test certification must be on record with the LA-RICS Authority.				
3.19	Power accessories: All necessary parts for powering device including AC/DC power adapter brick and cord for 100-240 VAC, 50-60Hz power source. Specify your minimum and maximum battery life during idle and working conditions and recharging time.	X			
3.20	Power accessories: additional replaceable battery and battery charger.				

Reference No.	LTE LMR Radio Requirements	Device Mandatory Minimum Qualifications (X = Yes)	Vendor's Device Compliant? (Vendor shall mark column with X)		Vendor Comments
			YES	NO	
3.21	Identify and recommend accessories that work with and support of the unit such as 1.) Micro USB cable 2.) Wired head phones 3.) Bluetooth head phones 4.) Vehicle charger 5.) Vehicle cradle 6.) External cases 7.) Screen covers 8.) Holster LTE LMR Radio holder 9.) External port extender cradle to enable connection to external antenna 10.) External antenna 11.) Installation kit				
3.22	Warranty and any offerings for extended warranties for the device must be on record with the LA-RICS Authority.				
3.23	Identify the processor and memory configuration (and options) used in the device. LA-RICS would prefer to internal memory storage at least 32GB that is expandable up to 128GB.				
3.24	Identify the current OS (operating system) used with the LTE LMR Radio device. LA-RICS recommends that the LTE LMR Radio device support the current OS and be software upgradable to the next OS.				
<b>Wi-Fi and Bluetooth</b>					
3.25	Device supports Wi-Fi station (STA) protocol IEEE 802.11b/g/n in the 2.4GHz band.				
3.26	Device supports Wi-Fi station (STA) protocol IEEE 802.11b/g/n with operations in both 2.4 and 5.8 GHz bands.				
3.27	Device supports Wi-Fi offload and may or may not support session persistence.				
3.28	EIRP of device exceeds 17 dBm with supported MIMO configuration				
3.29	EIRP of device exceeds 24 dBm with supported MIMO configuration				



Reference No.	LTE LMR Radio Requirements	Device Mandatory Minimum Qualifications (X = Yes)	Vendor's Device Compliant? (Vendor shall mark column with X)		Vendor Comments
			YES	NO	
3.30	The device supports Wi-Fi Access Point (STA) protocol IEEE 802.11a in the 4.9 GHz band.				
3.31	Device supports Wi-Fi station (AP) protocol IEEE 802.11b/g/n with operations in dual bands, 2.4 and 5.8 GHz.				
3.32	EIRP of device exceeds 17 dBm with supported MIMO configuration				
3.33	EIRP of device exceeds 24 dBm with supported MIMO configuration				
3.34	The device supports Wi-Fi Access Point (AP) protocol IEEE 802.11a in the 4.9 GHz band.				
3.35	The device may support Wi-Fi Station (STA) protocol IEEE 802.11a in the 4.9 GHz band.				
3.36	The device supports WPA2-Enterprise				
3.37	If the device has WPS capability, it must support disabling that feature.	X			
3.38	The device supports at least one SSID				
3.39	The device supports multiple SSIDs				
3.40	The device is capable of non-broadcast or hidden SSIDs.				
3.41	The device supports Bluetooth 4.0 or higher.				
<b>GPS</b>					
3.42	The device supports autonomous (standalone) 3-channel, or higher GPS solution.				
3.43	The device supports autonomous (standalone) 3-channel, or higher GPS solution and at least one other satellite system (e.g. GLONASS).	X			
3.44	The device supports autonomous 12-channel, or higher GPS and GPS augmentation (WAAS).				
3.45	The device support autonomous GPS (USA GPS) and at least one other satellite system (e.g., Galileo, European GPS) and GPS augmentation				
3.46	The GPS position is refreshed at a rate of 5 Hz or faster. High sampling rate required for high-speed vehicles.				

Reference No.	LTE LMR Radio Requirements	Device Mandatory Minimum Qualifications (X = Yes)	Vendor's Device Compliant? (Vendor shall mark column with X)		Vendor Comments
			YES	NO	
3.47	The GPS position is refreshed rate of 1 Hz or faster.				
<b>Device Management</b>					
3.48	The device policies are settable via OMA-DM 1.2v (or higher) compliant managers.				
3.49	Device supports LA-RICS certified extensions to the OMA DM Management Information Bases (MIBs).				
3.50	The device provisioning may be settable via vendor's proprietary Web-based management.				
<b>Applications</b>					
3.51	Device is compatible and tested with NetMotion's Locality software.				
3.52	An LTE performance application is supported by the device supplier				
3.53	Vendor supported push-to-talk (PTT) device client is managed by OMA-DM 1.2v compliant server.				
3.54	Vendor supported Automatic Vehicular Location (AVL) device client. Management may be via OMA-DM 1.2v, or Web based.				
3.55	Vendor supported weather client.				
3.56	Vendor supported Internet Browser.				
3.57	Circuit switched voice or VoLTE.				
3.58	Vendor supported VoIP application (SIP based).				
3.59	Vendor supported Messaging (SMS and MMS).				
3.60	Vendor supported CMAS client.				
3.61	Vendor supported email client.				
<b>UE Security</b>					
3.62	The device utilizes a trusted boot.				
3.63	The device utilizes a hardware root of trust and trusted boot.				
3.64	The device utilizes a hardware root of trust and trusted boot, and attestation.				

Reference No.	LTE LMR Radio Requirements	Device Mandatory Minimum Qualifications (X = Yes)	Vendor's Device Compliant? (Vendor shall mark column with X)		Vendor Comments
			YES	NO	
3.65	The UE supports Advanced Authentication (AA) as defined by CJIS security policies. Ref: <a href="http://www.fbi.gov/about-us/cjis/RequirementsDocument.pdf">http://www.fbi.gov/about-us/cjis/RequirementsDocument.pdf</a>				
3.66	The device is FIPS 140-2 security class level 1 certified by an accredited Cryptographic Module Testing laboratory. Test certification must be on record with the LA-RICS Authority.				
3.67	The device must meet FIPS 140-2 security class level 2 certified by an accredited Cryptographic Module Testing laboratory. Test certification must be on record with the LA-RICS Authority.				
<b>UI Interface</b>					
3.68	Device includes an integral speaker(s) that is louder than customary in consumer devices. Describe the Decibels of your handset	X			
3.69	Device uses noise cancellation technology.	X			
3.70	User interface (UI) display is designed for outdoor use with brighter screen than found on consumer devices.	X			
3.71	Device touchscreen operates successfully with gloves on.				
<b>Certification</b>					
3.72	Device must be FCC Part 90 certified. Test certification must be on record with the LA-RICS Authority.	X			
3.73	Device must be FCC Part 15 certified. Test certification must be on record with the LA-RICS Authority.	X			
3.74	Device is PTCRB certified for Band 14 operations. Test certification must be on record with the LA-RICS Authority.	X			
3.75	Device is certified for operation on the alternate carriers to be used in the operation of the device. Test certification must be on record with the LA-RICS Authority.				

Reference No.	LTE LMR Radio Requirements	Device Mandatory Minimum Qualifications (X = Yes)	Vendor's Device Compliant? (Vendor shall mark column with X)		Vendor Comments
			YES	NO	
3.76	Device must be IOT certified with Ericsson RAN. The IOT test plan will be consistent with published CTIA Certification Test Plans. The expectation is that the tests should be executed by a CTIA Authorized Test Lab. Specific test suites to be provided by LARICS. Normative Reference: <a href="http://www.ctia.org/policy-initiatives/wireless-device-certification/certification-test-plans">http://www.ctia.org/policy-initiatives/wireless-device-certification/certification-test-plans</a>	X			
3.77	Device must be interoperable with the device management system. Test cases will be consistent with Interoperability test cases in the OMA document: “Enabler Test Specification for Device Management”, Jan 2008 Normative reference: <a href="http://technical.openmobilealliance.org/Technical/Release_Program/docs/ETS/OMA-ETS-DM-V1_2-20110128-C.pdf">http://technical.openmobilealliance.org/Technical/Release_Program/docs/ETS/OMA-ETS-DM-V1_2-20110128-C.pdf</a>	X			
3.78	Device must be <i>conformance</i> tested on the LA-RICS network by the vendor under the observation and approval of LA-RICS personnel or its agents. The base conformance test plan will follow CTIA’s, “Certification Program Test Plan”, see link below. The detailed step-by-step IOT plan will be developed by the vendor, then reviewed and approved by LA-RICS. Normative Reference: <a href="http://www.ctia.org/docs/default-source/default-document-library/ctia-test-plan-for-lte-interoperability.pdf?sfvrsn=0">http://www.ctia.org/docs/default-source/default-document-library/ctia-test-plan-for-lte-interoperability.pdf?sfvrsn=0</a>	X			
3.79	Device must be <i>acceptance</i> tested by LA-RICS. Test plan may be based upon all processes from device ordering through drive tests on the LA-RICS network. The purpose of the tests is to operationalize the device and ensure a good quality user experience.	X			