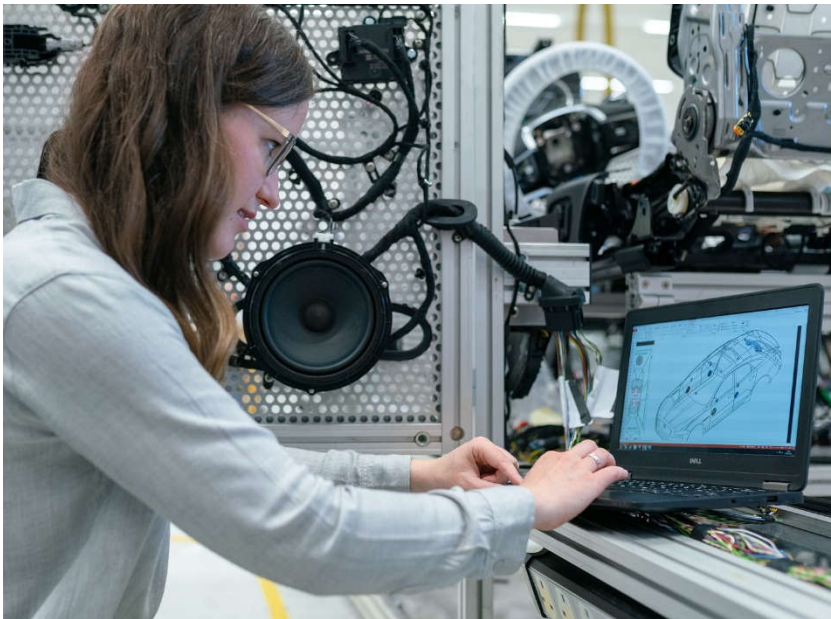


AT&T Professional Services can coordinate and oversee IoT device certifications



AT&T offers complete end-to-end certification services with testing, re-design and application submission capabilities spanning 150+ countries.

IoT devices range in complexity, purpose and cost, yet all need certification to operate on a cellular network – whether based in the U.S. or roaming on networks overseas. And certified not just at the chipset, module, or antenna-level, but also as a fully assembled device.

Depending on the components used, whether these have been certified in advance by the original equipment manufacturer, the

device may pass PTCRB (certification forum run by select North American cellular operators), FCC, and carrier testing in the U.S. with little fanfare. Or it may not.

In which case, it may require significant or last-minute re-engineering, re-design or alternate component selection expertise, such that it generates low levels of spurious radio emissions, meets all requirements and passes all tests.

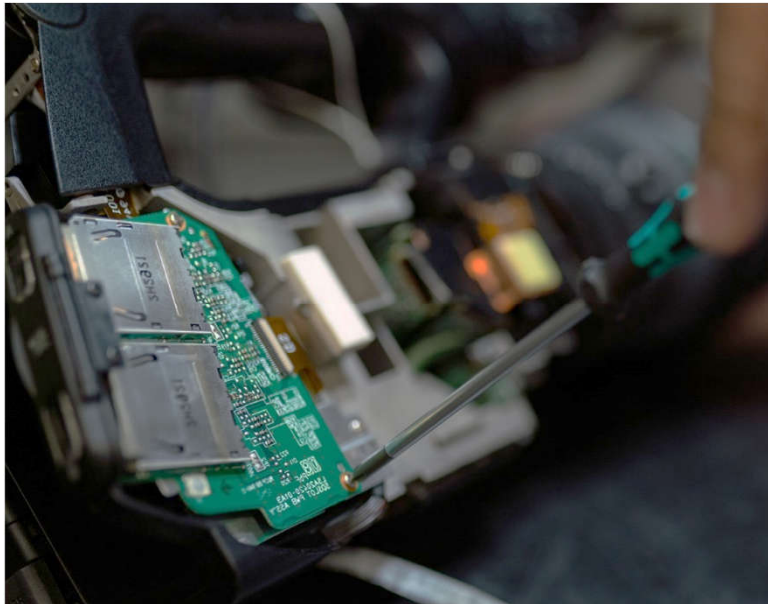
Potential Benefits

- Simplify a complex certification process, both in the U.S. and across the developed and developing world.
- Facilitate market entry for new devices while managing or even reducing overall costs
- Reduce risk across complex launch schedules, manage exceptions or unforeseen delays.
- Adhere to local regulatory requirements and processes for certification or re-certification.

Features

- Antenna and field performance testing in certified IoT labs.
- Agreements with device design experts world-wide.
- Extensive knowledge base of most of world certification requirements

Whether in need of PTCRB, FCC Part-B, CE RED or any other certification, improve your odds of getting certified promptly, manage costs and risks, and meet complex launch schedules.



Lab-based antenna testing helps find performance issues prior to more expensive field testing.

The lab testing **verifies the device antenna performance** in all applicable frequency bands and radio technologies to support optimal antenna design.

In all cases, AT&T Professional Services can provide the assistance required. Our consultants are happy to work with you, to understand timelines and parameters, and provide a quote for any services you require. AT&T does provide a 'self-service' certification model, with pre-negotiated prices with labs for PTCRB testing, and this option may be viable when all components are pre-certified. However, should any 'hands-on' technical assistance be required, when multiple countries are involved, or when a complex market schedule and order of precedence is involved, it's may be best to use AT&T professional services.

Device certification

Improve your device approval rate, streamline the processes, reduce your costs, execution risks and time for product launch through our: device performance testing and device certification.

- **Starts with a roadmap** for your device launch, lays out all dependencies, captures requirements, major decision gates and periodic reporting needs
- Ensures **up-to-date** information on the steps and timelines for country and regulatory certification and renewal requirements
- **Turn-key** service managing the complex approval process for countries, regulatory bodies and telecom providers
- Can significantly **improve time and costs** for device launch on any cellular network

Device testing

Device application and antenna testing

- **Lab test IoT embedded application and antenna** performance to identify potential problems prior to certification
- **Field testing** can include pre-determined challenging countries and operators across a variety of cellular technologies

Customized device testing

- To ensure your device launch meets all your criteria, additional **customization** can be provided to the testing process
- **Customization can include:** more countries, operators and non-cellular technologies such as Satellite, Wi-Fi and other sensor technologies

IoT embedded application testing **identifies communication issues early in design and launch**. It tests the behavior of the embedded interoperability functions, records the service performance of the application layer under different radio conditions, and identifies potential device behaviors which cause network related problems.

AT&T's experience with certification organizations allows you to move your IoT innovation to market.

Canada – Innovation, Science and Economic Development Canada (ISED)

Mexico – Instituto Federal de Telecomunicaciones (IFETEL)

Colombia – Ministerio de Tecnologías de la Información y las Comunicaciones (MinTIC)

Brazil – Agencia Nacional de Telecomunicacoes (Anatel)

European Union Countries – Radio Equipment Directive (RED)

Hong Kong – Office of Communications Authority (OFCA)

Israel – Ministry of Communications (MOC)

Malaysia – Malaysian Communications and Multimedia Commission (MCMC)

China – Ministry of Information Industry (MII)



Australia – Australian Communications and Media Authority (ACMA)

United Arab Emirates – Telecommunications Regulatory Authority (TRA)

Singapore – Info-communications Media Development Authority of Singapore (IMDA)



We have experience with more than
150 COUNTRIES

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To learn more about Global Device Certification Services from AT&T, visit
www.business.att.com/solutions/Family/internet-of-things/iot-development/
or [have us contact you](#).