SUPPORTING IOT SERVICES, APPLICATIONS AND WIRELESS CONNECTED DEVICES

Connectivity, Data Security, Accountability and Quality of Service are of great importance for the set-up and lifecycle management of smart "Internet of Things" (IoT) services. As a global group of engineering and test centers, 7layers has many years' experience with wireless technologies, which we combine with the capabilities of our mother company Bureau Veritas and further partners, thus covering the extensive requirements of the IoT.

7layers not only supports the manufacturers and suppliers of connected devices but also other stakeholders in IoT processes, such as IoT services providers and application developers.

At the heart of IoT processes are wireless connected devices that can be complex to develop, assess and certify. Supporting manufacturers and suppliers to bring such products to market as smoothly as possible is one of our core competences. Our technology know-how, coupled with our expertise in setting-up efficient test and market access processes, makes 7layers an ideal partner for industries in various sectors.

In the area of wireless connected devices 7layers supports

- Manufacturers and vendors of chipsets and modules
- Manufacturers and vendors of connected devices from industries such as
  - Automotive
  - Tracking & Tracing (RFID), Security
  - Wearables, Wireless Health
  - Smart Home, Smart Metering, Smart City
  - Industry 4.0 etc. …

7layers - testing for a smarter world

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Succeed with IoT services, applications and devices

CONNECTED DEVICES CONSULTING, ENGINEERING, MARKET ACCESS

Test House | Systems House | Software House

7layers - helping you manage the growing complexities of an ever more connected world

TECHNOLOGIES
Cellular, LPWAN, Short Range
Bluetooth®, WLAN, NFC, LORA, NB-IoT...

Meet connectivity, interoperability, security and quality standards for wireless connected devices

7LAYERS RADIO TECHNOLOGY EXPERTISE FOR CONNECTED DEVICES

Connected devices and applications for wireless health care, automotive industries, connected home, wearables etc. are increasingly wide-spread. However, the official and private standards that connected devices have to meet are complex and the effect that technical details can have on their certification status needs to be understood before bringing such devices to market.

7layers has years of experience in testing products with integrated wireless technologies and works together with world's leading chipset and module manufacturers as well as IoT services providers and network operators. Based on this experience we analyze the connected devices plus the integrated modules and antennas, to set-up a customized, safe and efficient test and market access plan. Our certification and regulatory type approval services are renowned for their efficiency and reliability. With our help, you obtain the necessary certificates for even the most difficult target markets.

Based on our technology expertise and engineering capabilities, 7layers also develops test specifications, test programs and test management systems that support the lifecycle management of complete IoT services, including the connected devices and applications. With 7layers as a partner you can make your wireless connected devices and smart IoT services measurable, certifiable and provable.

SERVICES FOR CONNECTED DEVICES

Test and Market Access Services
The comprehensive capabilities of 7layers accredited test labs are complimented with the Bureau Veritas network and other in-country partner test-labs all over the world.

Product Assessments

- Development testing
- Regulatory testing
- Conformance testing
- Interoperability and field testing
- Antenna, Battery, Safety and Health testing
- EMC testing

Regulatory Type Approval
For all countries worldwide, including RED (R&TTE), CE-marking, e-marking, FCC, ISED Canada rules etc.

Certification and Approvals

- PTCRB and GCF
- Bluetooth®
- IoT services providers /network operators
- Made for iPhone
- LPWAN (LoRa, Sigfox …)
- Thread
- MirrorLink™, ZigBee …

Engineering Services
Standard test and certification procedures can be inadequate for wireless connected devices if they become part of an IoT services set-up. Here requirements such as connectivity, interoperability, data security, accountability and quality are of key importance. We help define private, customized test parameters that go beyond official rules & regulations, develop reliable and economical test strategies, and provide support for further developments.

Market Access Consulting

- Wireless associations
- Radio technology issues
- Module integration
- Test plan strategies
- Certification maintenance
- Frequency management
- End2end security issues

RF Consulting
RF performance is crucial to devices with wireless connectivity. Size and housing of the device, suitable antennas, shielding, frequency bands etc. need to be taken care of. We support you with

- RF consulting packages
- Antenna integration & optimization
- Antenna assessments (OTA)