



WIRELESS EXPERTISE FOR DEVELOPMENT AND ASSURANCE OF MHEALTH STANDARDS

There is no longer any doubt that the introduction of wireless technologies (2G, 3G, LTE, Bluetooth®, NFC,...) into the healthcare sector will transform the way health services are being delivered across the globe. Wireless and mobile health services and devices have the potential to enhance the healthcare experience of people in both industrialized and developing countries. At the same time they can ease the financial situation of our health systems.

However there are certain obstacles that need to be overcome when introducing wireless technologies into a field in which reliability, security and safety are so crucial.

As a global engineering and test house group 7Layers has in-depth experience of all important wireless technologies. For health devices with integrated wireless modules and chip-sets we offer

- Module integration support
- Antenna integration support
- Test services
- Certification & type approval
- Test solutions.

In addition 7Layers is working to build partnerships with researchers, manufacturers and healthcare initiatives with the aim of developing harmonized communications standards, certification and test programs for mobile healthcare systems.

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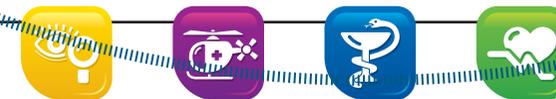
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Services for mHealth products and applications



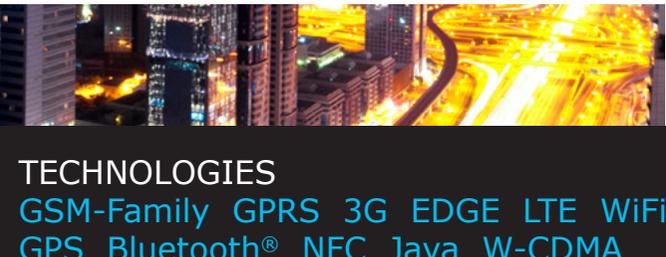
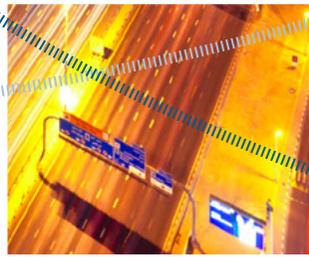
WIRELESS HEALTH STANDARDS DEVELOPMENT, TESTING & CERTIFICATION

Test House | Systems House | Software House



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Prepare for a smarter world of healthcare with development services, testing, certification from the global 7Layers group



TECHNOLOGIES
 GSM-Family GPRS 3G EDGE LTE WiFi
 GPS Bluetooth® NFC Java W-CDMA

Meet security and reliability standards for wireless healthcare products and applications

7LAYERS RADIO TECHNOLOGY EXPERTISE A RELIABLE BASIS FOR MHEALTH PROJECTS

Wireless and mHealth products and applications are predestined to take over a vast number of applications, whether for patients who are bed-ridden or those who are travelling, whether to support senior citizens living independently or for the remote supervision of sick youngsters.

However, application enabler and device manufacturers as well as network operators and healthcare IT developers must ensure that such products and applications meet the requirements of patients, medical staff and healthcare institutions.

For life critical devices

- Reliability
- Security
- Interoperability

7Layers understands the challenges associated with the use of wireless technologies in the wireless health and /or mobile health ecosystem. For this reason we are currently working to build partnerships with the aim of achieving

- End2end security
- Quality of service
- Economies of sale

TEST AND MARKET ACCESS SERVICES

7Layers has a global network of accredited, state-of-the-art test laboratories for health-care products with integrated wireless modules or chip-sets, as well as for health-care applications. Based on our lengthy experience with even the most complicated wireless products, we offer a variety of product assessments and market access services.

PRODUCT ASSESSMENTS

- Development testing
- Regulatory and conformance testing
- Interoperability and field testing
- Application testing
- Antenna, Battery, Safety and Health testing (OTA tests)
- EMC testing

GLOBAL TYPE APPROVAL

For all countries worldwide
 e.g. R&TTE, CE-marking, E-marking, FCC, IC Canada, etc.

CERTIFICATION & QUALIFICATION

- PTCRB and GCF certification
- Bluetooth® qualification and listing
- Network operator approvals
- Purchasing approvals
- Made for iPhone certification

DEVELOPMENT SUPPORT

Standard test and certification procedures for wireless communications products are not necessarily adequate for mHealth products.

7Layers can help develop the necessary standards to improve interoperability of wireless healthcare devices and systems.

CONSULTING SERVICES

- Radio technology issues
- End2end security issues

DEVELOPMENT SERVICES

- Test programs
- Test specifications and test cases
- Test Solutions (e.g. for Cardiac Pacemaker)

ANTENNA SERVICES

Satisfactory antenna performance is crucial to devices with wireless connectivity such as mHealth products. For this, size and housing of the device, shielding, frequency bands etc. need to be taken care of. Turn to us for

- Antenna design
MICS: medical implant communications systems
- Antenna integration
- Antenna assessments (OTA) from 400 MHz to 6 GHz

