



BRING WEARABLE DEVICES TO MARKET WITH OUR COMPREHENSIVE SERVICE PORTFOLIO

With our expertise in testing for a Smarter World, 7layers provides you with test and certification services necessary to bring wireless-connected wearable devices to market. In many cases the wearable device is integrated into a Smart Service via the user's Smartphone.

7layers is an expert in testing wireless devices. However, our services go beyond testing and certification of mobile and/or wearable end-products. We also analyze the integrated

- Wireless Chipsets
- Modules
- Antennas
- Batteries
- Applications

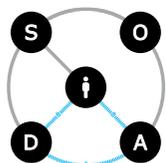
This comprehensive offering helps you optimize your wearable end-device and streamline the test and certification processes.

As a company of the Bureau Veritas group, we draw on the extensive know-how in the group to analyze the integrated

- Fastening Equipment

As the originator of the **SODA**[®] model, which describes the functionalities and the stakeholders of smart IoT services, we also support you in developing, analyzing and certifying the related

- Applications
- Data Platforms
- Triggered Actions
- Smart IoT Services



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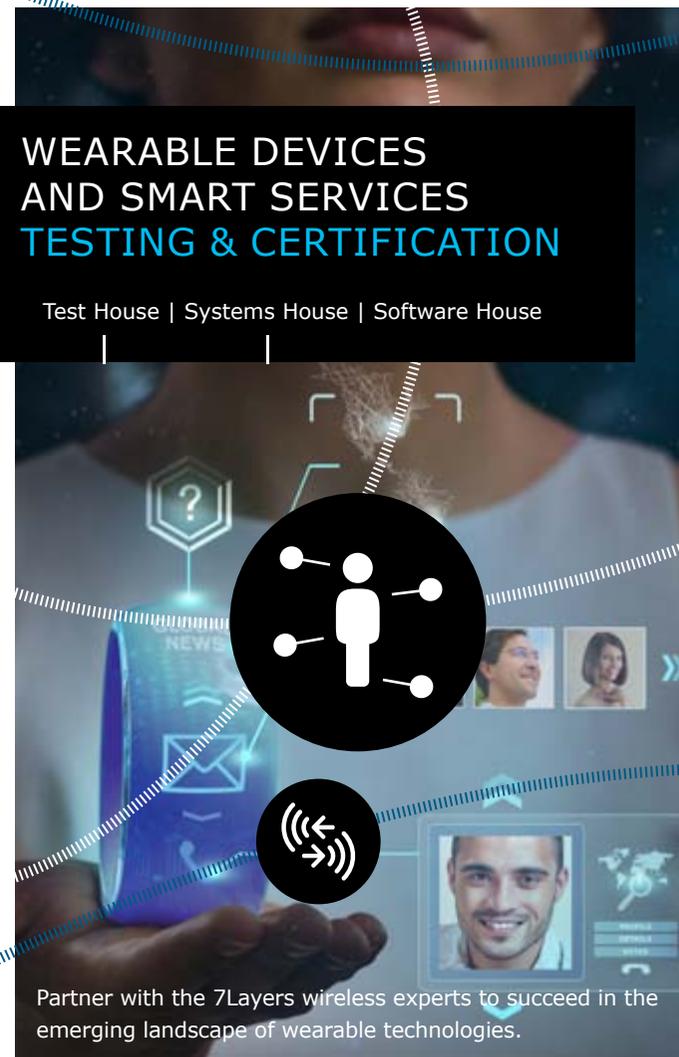
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Supporting the wearable technologies landscape

WEARABLE DEVICES AND SMART SERVICES TESTING & CERTIFICATION

Test House | Systems House | Software House

7layers - A Bureau Veritas Group Company



Partner with the 7Layers wireless experts to succeed in the emerging landscape of wearable technologies.



TECHNOLOGIES

Bluetooth®, Short Range, ZIGBEE, WLAN, LPWAN, LoRa, NFC, GSM, LTE ...



Take the smart way to market for integrated wearable devices and Smart Services

SUPPORTING DEVELOPERS OF WEARABLE DEVICES AND SMART SERVICES

Wearable devices with integrated wireless technology can enhance many different areas of our lives. A large number of devices are designed for usage within the fitness or health sector, but child monitoring, service & maintenance activities and many other actions can also be supported.

Technological progress in areas such as sensors, data processing and wireless connectivity permits the use of ever smaller form factors. Headsets, smart glasses, smart watches etc. are all becoming less bulky and more attractive. Even a new generation of wearables is emerging in the market: Connected plasters or tattoos that feel like a natural extension of the body. All these have the potential to integrate us into the Internet of Things (IoT) and enable us to conveniently use a multitude of smart IoT services.

While such an environment brings many advantages for the end-user, its functionality is also highly complex and inherently prone to error. IoT services with integrated wearable devices will only bring the promised advantages to the end-user - and gain wide market acceptance - if all the elements involved harmonize consistently with each other and function faultlessly.

Based on our outstanding experience in the wireless world, 7layers is able to support module and end-product manufacturers, trading organizations as well as IoT services providers with a comprehensive portfolio.

TEST AND MARKET ACCESS SERVICES FOR **WEARABLE DEVICES**

The comprehensive capabilities of our own accredited test laboratories for wireless devices are ideally supplemented by Bureau Veritas labs and in-country partner test labs.

PRODUCT ASSESSMENTS

- Development & approval testing
- Interoperability testing
- Performance testing
 - Battery life time
 - Health & Safety
 - Simulated Environments (Urban, vehicle, etc...)
- EMC testing
- OTA testing – incl. anechoic & reverberation, device only, with phantom or live body testing
- Chemical testing

REGULATORY TYPE APPROVAL

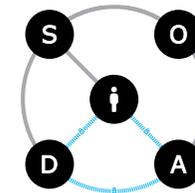
- RED, CE-marking, e-marking
- FCC, ISED etc.
- all other countries worldwide

CERTIFICATION & QUALIFICATION

- Purchasing & Network operator approvals
- GCF and PTCRB certification
- Bluetooth® qualification
- Thread, LoRa, Sigfox etc.

DEVELOPMENT AND TEST SERVICES FOR **SMART IOT SERVICES**

In order to provide additional benefits, wearable devices are often connected to IoT services. These are based on the analysis of the data which has been transmitted by the wearable device. In order to make such a service reliable and secure, one has to understand the underlying processes, stakeholders and essential requirements. For this purpose, 7layers has developed its SODA® model:



- Connectivity
- Data Security
- Accountability
- Service Quality

www.7layers.com/SODA

We support you in developing and managing the approval and maintenance processes required for complete IoT services lifecycles. This is based on our comprehensive experience with complex wireless devices and applications.

- **CONSULTANCY:** Process analysis, requirements management, test process management
- **ENGINEERING SERVICES:** Development of specifications, test programs, test cases
- **INTERLAB EVO TEST MANAGEMENT SYSTEM:** requirements management throughout the complete services lifecycle management