



*driving **your** success*

*Prepare to win —
make your in-house
test and analysis processes the best!*



*highly efficient planning, set-up, support and maintenance services
for your wireless communications test laboratories*

Highly efficient in-house test and analysis processes — the key to your success

Engineers at 7 layers have been engaged in the development of wireless communications technologies since the late 1980's. Thanks to the structure of our activities, we have been able to combine the scientific aspects of developing specifications and test cases with the practical experience of planning, setting-up and running highly efficient test laboratories.

This has enabled us to gain the most comprehensive knowledge of a wide range of test requirements, coupled with a deep understanding of all matters relating to test and measuring equipment.

With the growing complexity of wireless communications products, the efficient management of product requirements is key to your success. At the same time, rapid product launches are essential in order to remain competitive. To satisfy these demands, 7 layers has introduced the "InterLab® system for fast and reliable test and analysis processes" into its own and many of its clients' laboratories, (more information at: www.interlab.net).

InterLab® is a combined management, information and process control system that can be adapted to all wireless communications technologies and test equipment. The InterLab® system supports hardware and software components testing, integration and implementation testing, product evaluation testing, certification and interoperability testing.

As a leading specialist in managing wireless communications test laboratories, 7 layers has become a valuable and highly appreciated partner for manufacturers of wireless communications products, chip-sets, protocol stacks, reference designs etc. As your InterLab® Service Provider, we ensure maximum efficiency in the planning, setting-up, operating, supporting and maintaining of wireless communications test laboratories.



Professionally organized in-house laboratories plus on-demand support and maintenance services

Test laboratory architecture

As an InterLab® Service Provider, 7 layers will support the planning and setting-up of your in-house test laboratory, whether new or extended, up to its point of operational readiness.

Based on a thorough requirements assessment, the 7 layers laboratory architect will plan the details of your laboratory and, if required, suggest the most suitable choice of test and measuring equipment.

Before installing the InterLab® system, he will supervise the set-up phase and ensure that all necessary equipment is in place. If required, he is able to oversee acceptance procedures running as far as accreditation level.

Depending on your specific demands, 7 layers provides a customized starter pack containing valuable technology information as well as certification and regulatory requirements.

The information includes:

- Technology know-how e.g. core and test specifications, feature specifications
- Test requirement information e.g. GCF, European R&TTE, PTCRB requirements, Chinese market access requirements, DIG field trial tests, Bluetooth qualification
- Test cases and parameterized tests based on standards from 3GPP, OMA, ETSI etc.
- Laboratory-specific information, for complete laboratory management

7 layers organizes training sessions during the set-up phase. These enable your personnel to fully understand all processes implemented by InterLab®, making them competent to operate the laboratory in the shortest possible time.

Test laboratory operation

You will be able to choose between various service levels depending on the size and type of your laboratory. Support & maintenance services are located in different time zones and are therefore available around the clock.

Support services may include a user support hotline, project support, test laboratory support and continuous customized training.

Maintenance services consist of updates of the InterLab® software components and the InterLab® information system. If required, 7 layers also organizes test equipment maintenance procedures.



***Play your best game
with a fully customized solution
from 7 layers***

The winning strategy — 7 layers expertise coupled with an outstanding test and analysis system

As your service provider for wireless communications in-house test laboratories, 7 layers draws on **many years of experience** in planning, setting up and running wireless communications test laboratories. This is based on a deep understanding of all important wireless communications technologies.

In order to maximize the efficiency of engineering, test and analysis processes, 7 layers **integrates the InterLab® system** into its clients' laboratories. InterLab® is the ideal tool to manage the growing complexity of product development, the continuous flow of new technologies and the diversity of measuring and test equipment.

InterLab® eases the handling of test equipment and ensures that automatically updated information is continuously available to all parties involved. Due to an exceptionally **high level of automation**, the actual test processes as well as reporting and analysis are fast and reliable.

The networking capabilities of InterLab®, allow physically separated laboratories and development departments to work together easily and efficiently.

If required, your InterLab® information system is kept **automatically up-to-date** with important information from the major committees in which 7 layers participates (e.g. 3GPP, ETSI, Bluetooth SIG, PTCRB, PVG, GCF, GSM Association, IEEE).

All **test results** generated within a specified project are stored in the information system, allowing detailed version (HW/SW) control. Thus, test results that have already been established can be **re-used** and unnecessary testing avoided.

All project-specific test cases existing within an organization remain available via the InterLab® information system, so that **test cases**, once developed, can easily also be **re-used**. Where project-specific test cases are required, 7 layers can provide you with these.

By using the InterLab® system in combination with on-demand support & maintenance services from 7 layers, it becomes possible to provide **test results** from your own in-house laboratory with an **official status**.

***Get the game running with 7 layers:
fully operational test laboratories
immediately after set-up of equipment***

Supporting communications technology development

- development of core specifications
- development of technology-related test specifications and test cases
- development of technology-related test solutions
- development of qualification / certification programs
- verification and validation services

Increasing efficiency of research & development projects

- consulting services
 - consulting on product specifications
 - integration of testing into development
 - test result analysis and management of product requirements
- development of product-related test specifications and test cases
- development of R&D test solutions

Speeding up market access for communications products

- test project management via InterLab®
 - conformance testing
 - interoperability and field testing, application-enabler testing
 - test service portfolio
 - type approval handling
- services for dedicated customer groups
 - qualification of reference designs
 - fast track certification for end-user product manufacturers
 - operators
- consulting on market access requirements

Providing InterLab® services for highly efficient test and analysis processes

- test laboratory architecture
 - planning, set-up and implementation
 - information: technology, market access
- test laboratory operation
 - support
 - maintenance



The 7 layers service portfolio

*driving **your** success*

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