

Add value. Inspire trust.

# Wireless products and devices

Certification and market access for wireless products

# **Your challenges**

Wireless technology plays a key role in today's communications and has rapidly transformed our world. The increased use of wireless technologies now extends far beyond laptop and mobile phones. They are now being included in all kinds of devices, from domestic appliances to industrial machinery.

Every country has different regulatory requirements for wireless products. Manufacturers, importers and retailers face the challenge in navigating the differing national standards to the various markets.

# What are wireless products?

Wireless modules provide products with communication technologies to support their specific function(s).

Common technologies include:

- Bluetooth<sup>®</sup>
- Radio frequency identification (RFID)
- Global positioning system (GPS)
- Near field communication (NFC)

- Global system for mobile communication (GSM)
- Wideband code division multiple access (WCDMA)
- Wireless local area network (WLAN)
- Long-term evolution (LTE)

Wireless communications systems come in several forms. Integrators will select the technology that supports their application. For example, cellular technology would be used if you are trying to telemeter data back to a centralised network due to the high-capacity coverage over a wide area. Whereas short-range technologies (WLAN or Bluetooth®) would support short range communication between devices like a smart fridge.

Depending on the intended functions, some end products could be classified as Short Range Devices (SRD). These types of devices typically have a low level of transmitted power, and hence their communication range is restricted.

The definition 'Short Range Device' may be applied to many different types of wireless equipment, including various forms of:

# TÜV SÜD

- Access control (including door and gate openers)
- Alarms and movement detectors
- Closed-circuit television (CCTV)
- Cordless audio devices, including wireless microphones
- Industrial controls
- Local area networks (LAN)
- Medical equipment and implants
- Mobile phones (Bluetooth<sup>®</sup>, WLAN)
- Radio-controlled systems
- Radio frequency identification (RFID)

**Conformity requirements in key markets** 

- Remote control
- Road transport telematics

- Smart home appliances
- Telemetry
- UWB sensors & radars (such as ground probing radar)
- Wearable devices

In addition to SRD, there are other end products that might integrate short range communication with dedicated cellular and/or satellite based communications modules.

These include mobile phones, laptops, navigation equipment, and safety critical communication devices used in autonomous cars or medical applications.

A wide variety of laws and guidelines from different countries must be met before your wireless devices can enter new markets. This table presents mandatory conformity requirements for wireless devices in more than 40 countries. We also provide support for countries and areas that are not listed here. Please contact us directly for more information.

CONTINENT	COUNTRY AND REGION	MANDATORY CONFORMITY REQUIREMENTS
EUROPE	💮 EU	CE Mark
	tceland	CE Mark
	Eiechtenstein	CE Mark
	🔲 Moldova	INSM Mark
	🕀 Norway	CE Mark
	🔎 Serbia	Serbian Mark of Conformity
	G Switzerland	CE Mark
	C• Turkey	CE Mark
	United Kingdom	UKCA
AMERICAS	Argentina	RAMATEL ID
	📀 Brazil	ANATEL Approval
	(🍁) Canada	ISED Approval
	🕘 Chile	SUBTEL Approval
	💼 Ecuador	ARCOTEL
	Mexico	IFETEL Certification
	United States of America	ACTA Approval, FCC Approval
AUSTRALASIA	🏷 Australia	RCM
	New Zealand	Telepermit, RCM
AFRICA	≽ South Africa	ICASA Approval
	手 Kenya	CA Type Approval
	Nigeria	NCC Approval
ASIA	👞 Brunei Darussalam	AITI Approval
	🚇 Cambodia	TRC Approval
	🥙 China	NAL Certification, SRRC Approval

CONTINENT	COUNTRY AND REGION	MANDATORY CONFORMITY REQUIREMENTS
ASIA	😵 Hong Kong	OFC Certification
	🧕 India	TEC Approval, WPC Approval
	– Indonesia	SDPPI Approval
	🔶 Japan	MIC Approval
	🌨 Korea (South)	KC Mark
	틒 Malaysia	MCMC Approval
	> Philippines	Philippines NTC Certification
	Singapore	IMDA Equipment Registration
	🍋 Taiwan	NCC Approval
	🛑 Thailand	Thai NBTC Approval
	😒 Vietnam	ICT Mark
MIDDLE EAST	Egypt	NTRA
	초 Israel	MoC Approval
	C Kuwait	MoC Approval
	🔶 Oman	Type Approval
	📟 Saudi Arabia	CITC Equipment Approval
	C United Arab Emirates	TDRA Approval
COMMONWEALTH OF INDEPENDENT STATES	Armenia	CE Mark
	🧿 Azerbaijan	MINCOM CoC
	💭 Uzbekistan	MITC
	💼 Tajikistan	Type Approval
	Turkmenistan	TDS CoC

# Why are wireless testing and certification important for your business?

There is an increased demand for wireless technologies to be included in all kinds of devices and applications. There is also a growing market of devices which use different types of wireless technologies to function.

A key reason for non-compliance of final host products containing wireless modules is that while these modules are compliant as an independent unit, once they are integrated into another product, this often changes the regulatory requirements.

It is therefore essential to take an efficient and systematic approach of managing compliance with regulations in order to optimise time to market and costs. Third-party conformity assessments also help to strengthen your competitive position in the market.

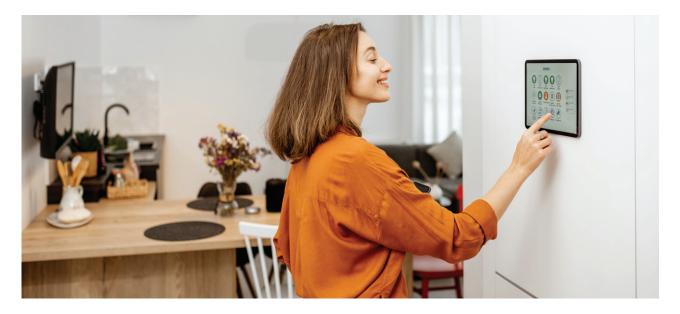
# How can we help you?

TÜV SÜD's experts can certify any of your wireless products. We are a recognised Notified Body (NB) under the European Union's Radio Equipment Directive, an Appointed Body for GB markets (UKCA marking), a Telecommunication Certification Body (TCB) for the U.S., an Industry Canada Foreign Certification Body (FCB) and a Conformity Assessment Body (CAB) for Japan and United Kingdom. Our global market access experts study target market access requirements and advise customers on the most efficient and economic certification path, ensuring that your product or radio module complies with the regulatory requirements of its intended market.

#### **Our services**

Our services include:

 Pre-evaluation of modules or end-user products – identify applicable standards in each target country and the most efficient certification approach.



- Testing to meet the regulatory requirements for market access to Europe, the U.S., United Kingdom, Canada, Japan, Australia and other related markets.
- Certification against the requirements of over 100 countries.
- Research our team of highly skilled experts has indepth knowledge of the latest changes and updates to the global regulations and standards which are relevant to your products and target markets.
- Quality assurance our global network of accredited test laboratories identify potential issues early to minimise market access and supply problems.

TÜV SÜD's Global Market Access (GMA) service determines applicable regulations, managing product compliance for the different countries into which you sell. Our GMA services for wireless products and devices include Africa, the Americas, Asia, Australasia, Europe and the Middle East.

#### Your business benefits

- Save time and money by covering all your testing and certification needs through our one stop solution, as well as using our technical pre-check service to avoid retests and minimise cost.
- Minimise risk of business disruption by ensuring that your products conform to a broad range of global market regulations.
- Shorten time to market through TÜV SÜD's process systems and advanced knowledge of regulations.
- Enjoy expert partnership with our team of highly skilled experts that has in-depth knowledge of the latest changes and updates to global regulations and standards.

# Why choose TÜV SÜD?

TÜV SÜD has experience in wireless device compliance, helping our customers to understand and comply with the wide variety of laws and guidelines from different countries and telecoms providers, which must be met before products can enter new markets.

Our experts have specialist knowledge in key industries such as marine, aviation, defence, electronics consumer products, and communication technology infrastructure and equipment. They ensure you have the competitive edge and certifications to uphold it.

# Add value. Inspire trust.

TÜV SÜD is a trusted partner of choice for safety, security and sustainability solutions. It specialises in testing, certification, auditing and advisory services. Through more than 25,000 employees across 1,000 locations, it adds tangible value to customers and partners, inspiring trust in the physical and digital world to create a safer and more sustainable future.

# **Related services**

TÜV SÜD provides the following related services:

- EMC testing
- ETSI EN 303 645 cybersecurity testing
- Marine testing and certification
- Quality management system audits
- Radio Equipment Directive
- Radio testing
- Safety testing
- SAR testing
- TÜV SÜD CyberSecurity Certified (CSC) certification