



## LONE WORKER & MAN DOWN

The TOUCHGUARD is an original Czech application for work activity monitoring developed and operated by the TTC TELSIS, a.s. Company. This system is currently used in 8 European countries and in Australia. In addition to many other features, it also includes a detailed Lone Worker System (hereinafter referred to as the "LWS" only).

The TOUCHGUARD system has been originally developed as an on-line patrol system for security agencies and it fully meets their needs. Today, thanks to advanced features, it is also used by cleaning agencies, facility companies (facility management and maintenance), service technology organizations as well as by companies with higher risk of injury (lone worker monitoring).

### HOW THE SYSTEM WORKS

To operate the LWS of the TOUCHGUARD only a mobile phone with an Android operating system and an Internet connection are required. The compact version is a smart watch with the Wear OS operating system and with its own eSIM for connectivity which is used in environments where the smallest and lightest mobile devices are required.

In § 5, section 1, letter e) of Act No. 309/2006 Coll., on ensuring health and safety at work, it is stated that the employer is obliged to organize work and to determine working procedures so that the principles of safe behaviour in the workplace are respected, and that employees in the workplace with increased risk do not work alone without the supervision of another employee, unless their protection is assured otherwise.

The LWS TOUCHGUARD stands exactly for the safety to be "assured otherwise". The Czech legislation does not specify how this should be done, therefore our LWS is designed according to the British standard BS 8484 (Provision of lone worker services) which describes in detail the processes how such a system should work.

As for the operation of the LWS TOUCHGUARD we recommend the use of durable devices from one of the manufacturers that are directly involved in the manufacture of telephones for industry, such as RugGear (outdoor and industrial model) or i.safe Mobile (ATEX Zone 1/21 and 2/22 explosive environments).

## METHODS FOR DETERMINING THE STATE AND POSITION OF WORKERS

- **Tilt** - i.e. the worker is in a non-standard position (only when using the phone).
- **Free Fall**
- **Impact**
- **Inactivity** - The worker does not move for some defined time.
- **Check of worker vigilance** - The worker must confirm that he / she is OK within the specified time interval.
- **SOS button on the phone / watch** - Some phone models also have a hardware SOS button for this purpose. The watch uses the HW button.
- **Heart Rate Monitoring** - This function is provided by the watches only. Thanks to a sensor the heart rate can be monitored. The alarm is triggered automatically when limit values are exceeded (below the minimum / above the maximum).
- **Phone is off-line** - If the worker gets out of the signal, there is a risk that the alarm will not arrive where it should. Therefore, the system also monitors the availability of connections to the server.
- **Localization: Outdoor** - using the GPS position of the phone / watch incl. geofencing function (monitoring the exact area where the phone is located)  
**Indoor** - getting GPS position from the so-called iBeacons (bluetooth transmitters)

## WHAT HAPPENS WHEN AN ALARM IS TRIGGERED

- The alarm is sent via data path to the server. You can use your own server environment or a PCO solution.
- SMS with the necessary data will be sent to any number of persons.
- The telephone call to the selected numbers starts dialling. The phone then automatically dials one number after another until the call is answered. The number of dialling cycles can also be set.
- It is possible to choose which actions and event reactions will be active.



## Contacts

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