

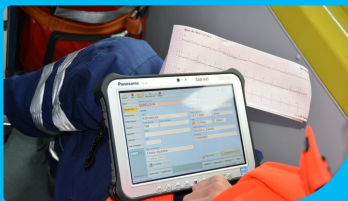


CASE STUDY

## South Moravia regional emergency medical services (English)

TO SAVE LIVES, SOUTH MORAVIA REGIONAL EMERGENCY MEDICAL SERVICES USE RUGGED PANASONIC TOUGHPAD FZ-G1 TABLETS AND WINDOWS 8.1

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Modern healthcare uses a number of advanced technologies, and today especially IT is the foundation of successful medical care. Moreover, IT is used in ambulances – a growing number of these vehicles is equipped with heavy-duty mobile PCs, which play a great part in saving people's lives. This is especially due to their usability in diverse circumstances and their ability to constantly provide access to important data and increase the effectiveness of individual medical and administrative processes. One example of a modern emergency service is the South Moravia Regional Emergency Services, which has started to equip its ambulance fleet with rugged Panasonic Toughpad FZ-G1 tablets.

### **Medical Emergency Services in South Moravia**

The South Moravia Regional Medical Emergency Services is an organization founded by the South Moravia Region and funded from the national budget. It provides urgent pre-admission care to individuals with a medical emergency over the whole territory of the region, which covers an area of 7,195 kilometers square and has 1.2 million inhabitants. The headquarters of the organization are in Brno-Bohunice; more than 500 employees take part in rescuing lives. The emergency services dispose of 93 vehicles and use 23 ambulance stations.

Emergency medical services vehicles are not like a quiet office workplace - resistance to shock, vibrations, drops and extreme temperatures is very important. Another factor that must be taken into account is resistance to bodily fluids and aggressive substances used in medical care. This also applies to Panasonic Toughpad FZ-G1 tablets, which meet the most demanding requirements of this class of information technology.

### **The Past and the Present**

The history of the application of rugged mobile equipment by South Moravia Regional Medical Emergency Services is relatively short. As late as in mid-2013, ambulance crew had to depend on voice information provided by operators, and it was almost impossible to get immediate access to more comprehensive data (including data on the patient's health condition). The work of the crew was made more difficult by the necessary paperwork, which usually meant filling in forms on the way or on return to the station. No wonder this caused inaccuracies and resulted in records that were difficult to read.

In less than six months, however, a change came when the crews received rugged Panasonic Toughpad tablets with the Windows 8.1 operating system. Besides being resistant to external factors, these devices boast excellent ergonomic features, Wi-Fi connectivity, a GPS module and a 10.1 inch touch screen display with outstanding legibility in direct sunlight. Moreover, all the tablets have a SIM card, allowing continuous mobile communication. The tablets are assigned to a specific crew or vehicle.



### Immediate access to information

The software base of the compact mobile solution, supplied by Medsol s.r.o., is the patient electronic card – this application can be accessed directly from the tablet and can be used both online and offline with subsequent synchronization. Due to access to central systems, up-to-date information is available to the crews throughout the intervention, from departure from the station to picking up the patient and delivering them for further care. Indeed, the amount of comprehensive data available is an important factor in the success rate of the intervention as it offers the possibility of selecting the right procedure according to the known history of the patient. Continuous communication is also important for hospitals and their emergency departments – it gives them the opportunity to make suitable and timely preparations for the admission of the patient.

The electronic card allows also checking of the acquired data, both as far as common validation at the identification data level and from the point of view of data completeness.

One special feature is a Newton Technologies predictive Latin dictionary of Latin terms, which specifies and speeds up the insertion of medical texts. A number of details is moreover automatically recorded and transferred to higher systems. The crew thus need not bother about sending “status” reports, such as information on the location of the ambulance or details of the current stage of the intervention (departing, on site, leaving with patient, etc.).



## Meticulous selection

When selecting heavy-duty equipment and the corresponding software, the South Moravia Medical Emergency Services took into account not only their own internal requirements, but also the experience of other emergency services in other regions. Very useful information was provided by the Vysočina Region Medical Emergency Services, which had started to equip their ambulances with rugged Panasonic Toughbook tablets in 2009. Besides high reliability and low susceptibility to failure, the selection criteria also included five-year sustainability support.

Emergency services staff, especially progressive physicians with experience in using mobile equipment, have welcomed the new technology in the form of rugged Panasonic Toughpad FZ-G1 tablets.

“During the tender we strictly insisted on all our requirements being satisfied. The decision to opt for the rugged Panasonic Toughpad FZ-G1 tablets with Windows 8.1 was made after careful evaluation, and our experience so far shows that we have made the right choice,” says Jindřich Vintr, head of the ITC department of the South Moravia Medical Emergency Services p.o. “The tablets allow ambulance crews to be mobile and react rapidly in the field,” Mr. Vintr adds.

## The Start of a Long Journey

Today, information technologies allow more lives to be rescued, especially thanks to the symbiosis of medical facilities, the corresponding SW equipment and high-quality heavy-duty technology that ensures the transfer of information even in demanding and stressful circumstances. Thanks to this support, rescue crews are able to pay more attention to the patient and less to paperwork.

