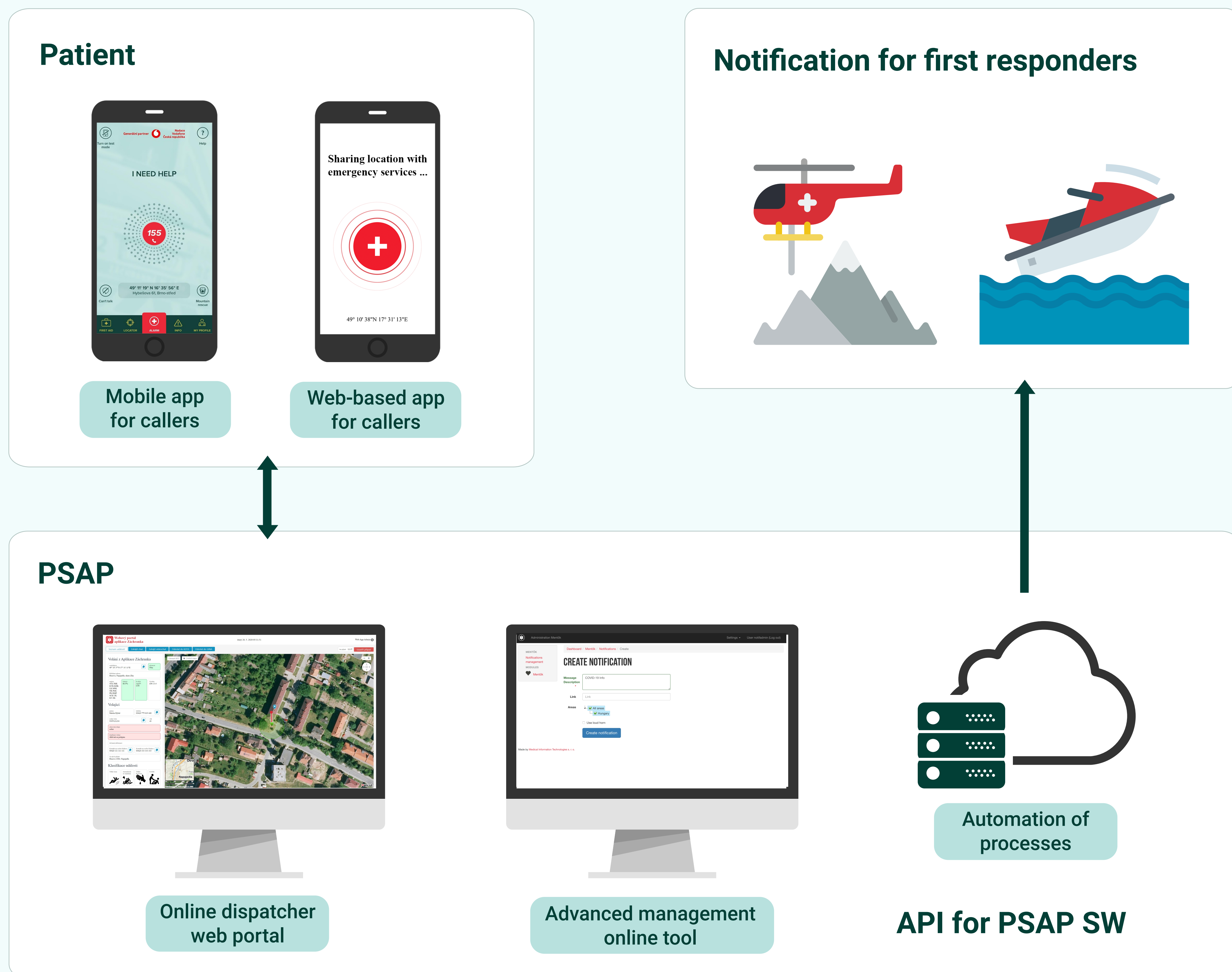


NG-SOS

Next generation EMS calling



Saving lives means a matter of seconds. The key to a quick and effective rescue operation is, above all, knowledge of the incident's exact location, type of emergency and patient identification. Unfortunately, the caller often isn't able to provide all of these, especially if they are in shock, seriously injured or their surroundings are unfamiliar. This is why we created the NG-SOS system, which significantly facilitates and streamlines both patient communication with the operations centre and managing the entire rescue operation.



The system uses all modern communication means to ensure the exact location, type of emergency and patient identification all take place seamlessly, and includes WebRTC technology for image transmission directly from the incident site. The system consists of five components that can function as a whole, or as separate modules.

- Mobile app for callers
- Web-based app for callers
- Online dispatcher web portal
- Advanced online tool for app management
- Unique automation of processes with API for CAD integration

Mobile app

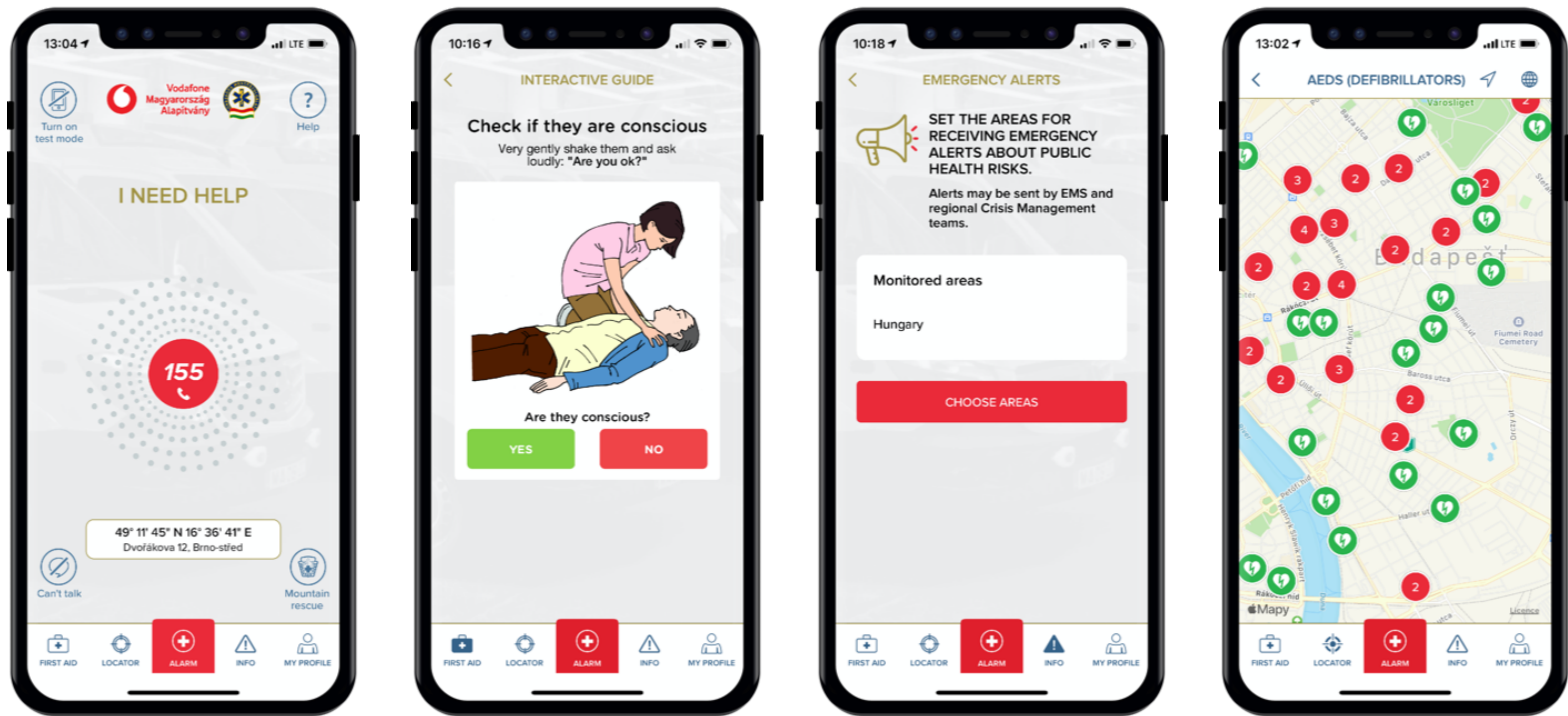
The app was tested and developed in cooperation with EMS professionals and provides the most accurate information about the caller by sending their location updates, complete medical profile, and basic pre-classification data, including next-of-kin contacts, mobile network, battery status and more. The app also provides an interface for online chat and video streaming. By combining all of this information provided, EMS crews can reach the patient in a far shorter period of time, thereby increasing the patient’s overall chances of survival. The app also supports communication for callers with speech disabilities and was also developed to fully support Voice Over technology for blind users.

During the last 5 years more mobile app-based emergency calling system in EU were adopted. Our goal is to provide easy and effective emergency calling to all citizens without need to download foreign emergency apps. NG SOS technology is therefore prepared to create interconnection with already existing national app from different provider to ensure cross border interoperability.



Our NG SOS app is the official nationwide Czech, Austrian and Hungarian app, and we provide our technology for mountain rescue operations in Slovakia. The concept behind this is for a universal platform with localized apps specific to each country and linked through a single interface, so that the app not only works in the user’s home country but also when they travel abroad for business or on holiday. This forms a unique link between EU countries using a common emergency mobile app technology to call for help. So far, patients have initiated thousands of rescue responses through this app.

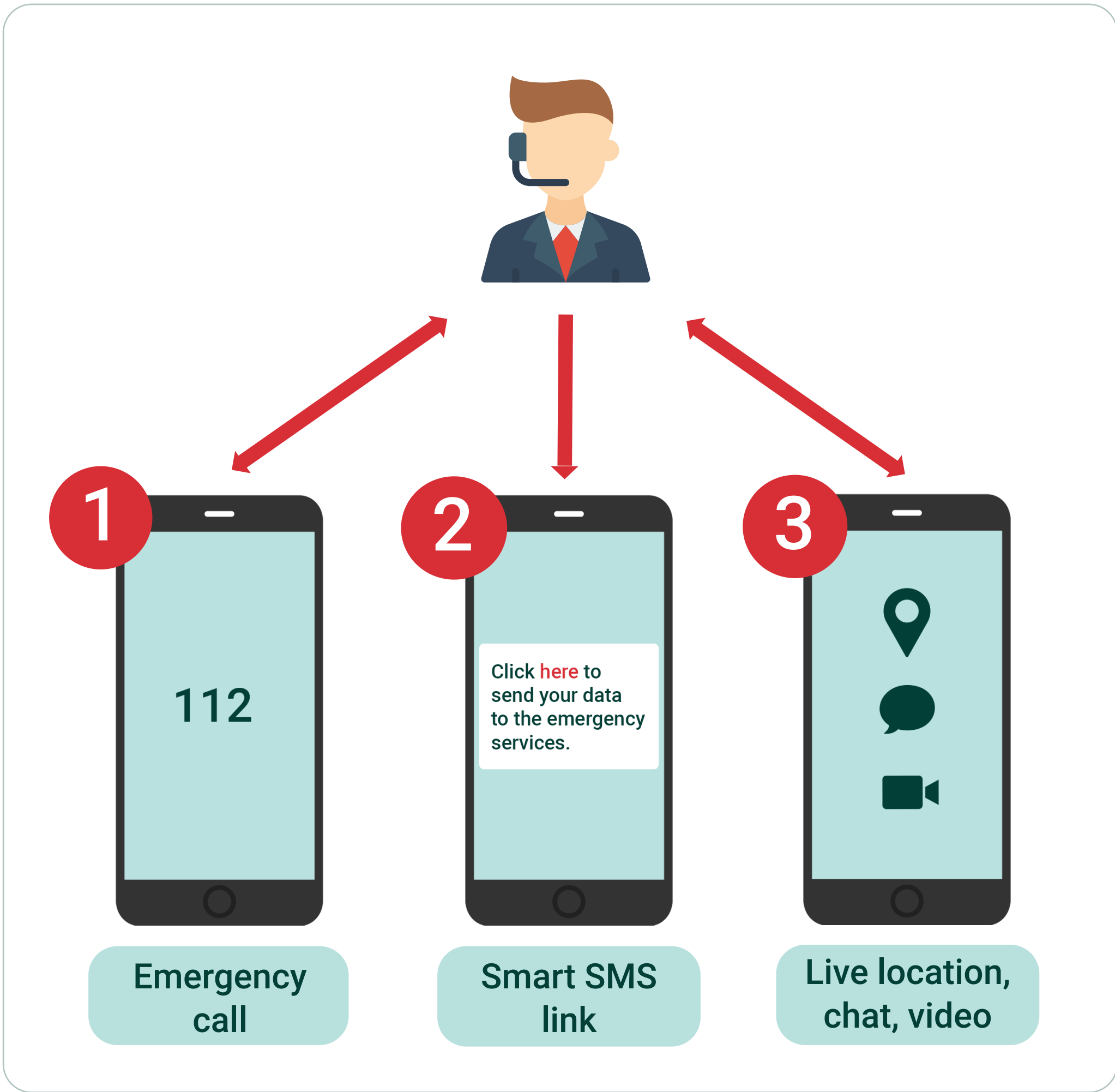
It also features an interactive First Aid guide with CPR, which functions as an intuitive user manual. Plus, users can register new AED locations through the app. One of the most important features is that it’s an extremely easy way for local authorities to effectively warn the public in the event of large-scale emergencies – via push notifications, automated calls or text messages to all users. This unique combination of emergency call function, first aid procedures, AED database and reverse emergency notification system has received excellent ratings from both experts and the wider public.



Web-based app for callers

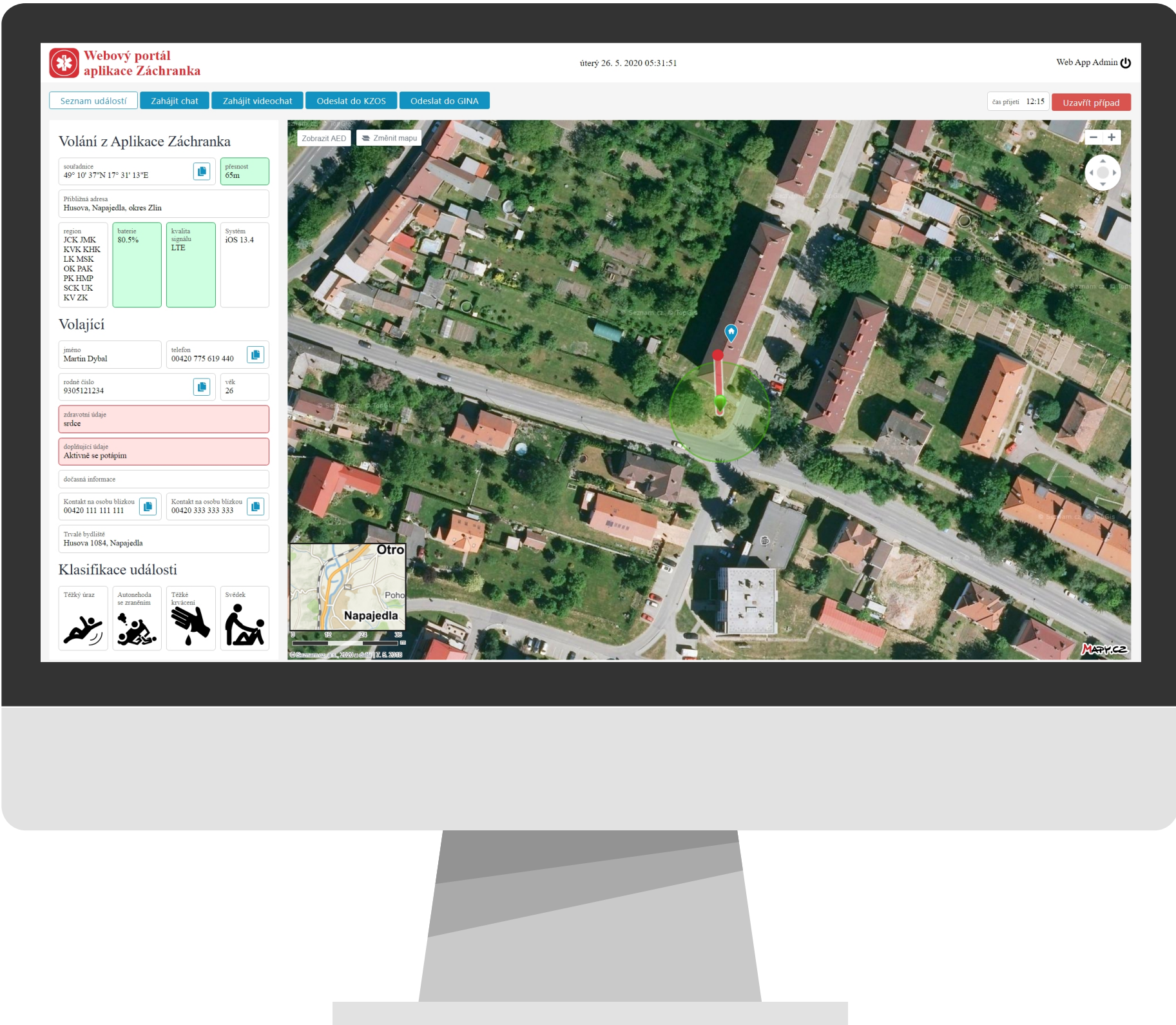
Not all emergency calls are made through a mobile app. Effective caller location, classification and identification is thus limited to the classic telephone call scenario and the individual operator’s own ability to make good use of this method in repeatedly stressful and demanding situations, with callers who are often in shock, disorientated, and possibly seriously injured. And sometimes trying to communicate all of the above a foreign language. NG SOS technology significantly streamlines and enhances standard emergency calls.

This specially-developed technology enables an SMS to be sent containing a so-called Smart Link to establish a connection via a WebRTC-based web app. The standard telephone call to the emergency line is immediately supplemented by the continuous transmission of location, image and chat with the caller.



Online dispatcher portal

The NG SOS system’s online dispatcher portal was designed based on the needs of emergency call lines. It enables access to information either from the caller’s mobile app or obtained via Smart SMS. It includes:

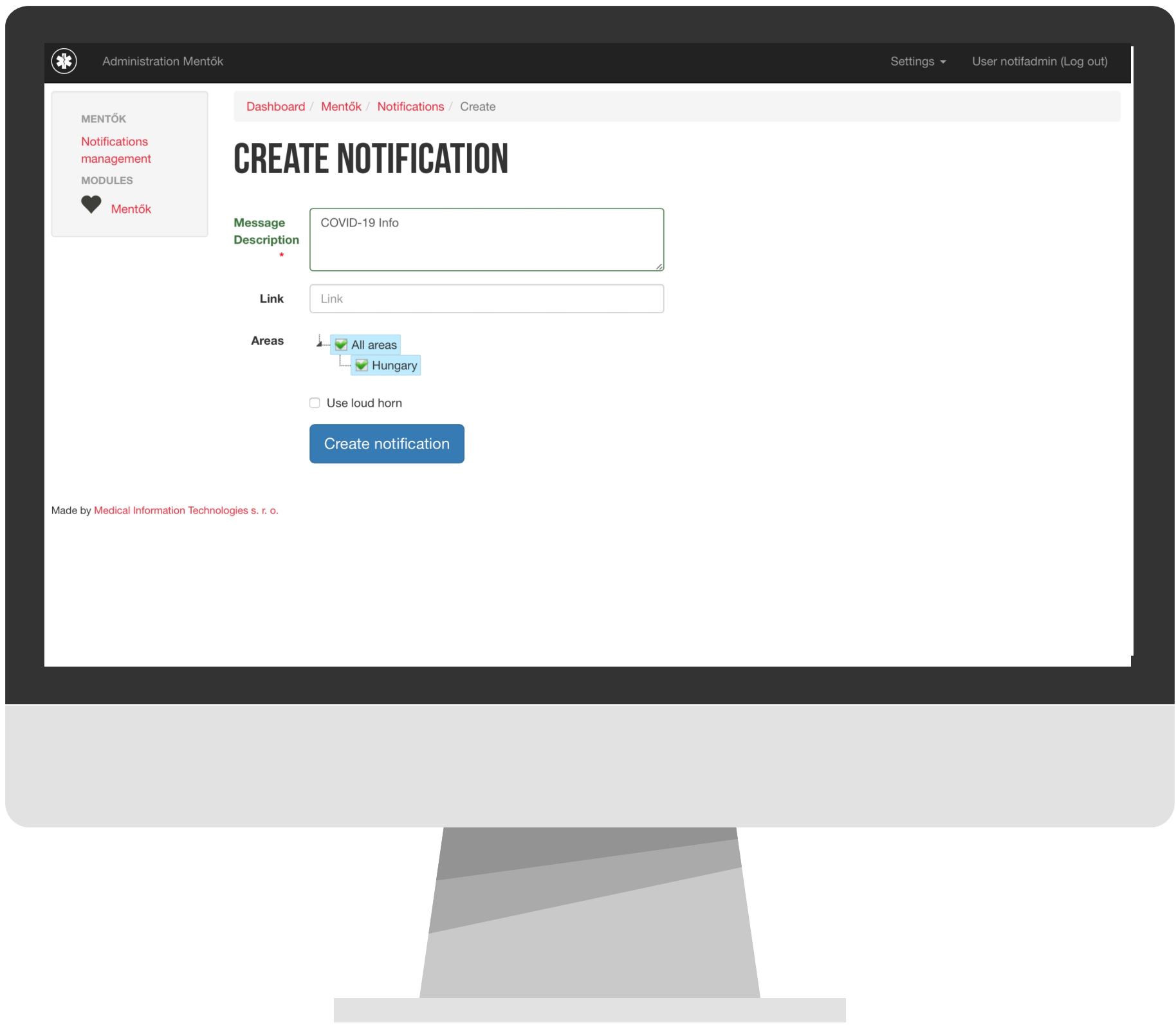


- An overview of calls from the mobile app within that region.
- A display of all caller information transmitted during the emergency call, including visualised map data.
- Establishing a WebRTC connection to the caller via Smart SMS to obtain continuous transmission of location, image and chat.
- The possibility for customisation and integration with other technologies, depending on the specific needs of the operations centre.

CMS: Advanced online tool for app management

Remote content management of a national mobile app for emergency calls or sending direct notifications to users has never been easier. With a sophisticated CMS, you can easily update Points of Interest in the app without the need for millions of users to update the app themselves.

An important function is the unique reverse emergency notification system, which enables emergency alerts to be sent to all users within a selected area, with the added option to supplement the alert’s arrival with an alarm message tone and display a link to the national authorities’ designated websites. Here, further information on official procedures in the event of pandemics, large-scale fires, chemical leaks etc. can be communicated quickly, effectively and directly to local or national populations.



Unique automation of processes with API for CAD integration

The NG SOS system is built on a robust backend solution that enables direct implementation within local operations management systems. All available functions can then be managed directly within the CAD system currently in use. The simple API has already enabled direct implementation within CAD systems in Austria, the Czech Republic, Slovakia and Hungary. The entire technology can be operated on the principle of a cloud solution or in the form of an onpremises solution.

The NG SOS system is used in specific situations in various countries for the automated activation of first responders from the mountain and water rescue services, who quickly and effectively supplement other EMS resources for a fast and efficient streamlined rescue operation.

- Automatically notifying mountain rescue teams in the event of an emergency call in mountain regions.
- Automatically notifying water rescue crews in the event of an emergency call from selected areas.
- Automatically notifying motorway police units in the case of calls from motorway areas.
- Showing nearest available AED devices for patient resuscitation by rescuers present on scene before EMS crews arrive.


Main benefits of the NG SOS system



- ✓ Key information regarding location, classification and identification of the caller are provided to the dispatch centre during the emergency call.
- ✓ Faster and more direct response times for rescue services arriving to the scene of the incident.
- ✓ More efficient management of rescue operations and coordination of integrated rescue units.
- ✓ Supports communication for callers with speech disabilities.
- ✓ Increased chances of patient survival in an emergency.
- ✓ A key tool for ensuring reverse emergency notification communication in the event of natural disasters, epidemics, etc.
- ✓ A comprehensive tool for AED management and other Points of Interest (hospitals, 24hr clinics etc.)
- ✓ Improving First Aid awareness and training.
- ✓ Improving access to health care and crisis communication for tourists from other countries. The system has cross-border functionality.
- ✓ Increased improvement of the country's international image with regard to health care and tourism.

Contact




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Our project's country-specific websites:
www.zachrankaapp.cz/en www.rettungsapp.com