

NEDAP SERVES CZECH HOSPITAL WITH AUTOMATIC VEHICLE IDENTIFICATION ✨

The Jihlava Hospital in the Czech Republic required a vehicle access control solution for both short term and long term parkers. Another important requirement was that emergency vehicles had to be identified in a high speed in order to quickly respond to critical events. Nedap business partner Green Center, headquartered in the Czech Republic, implemented a complete parking solution including Nedap's uPASS system for fast and secure automatic vehicle identification.

Serving 150.000 inhabitants

The Jihlava Hospital is situated in the middle of the Vysočina region in the Czech Republic. It is a progressive health care institute serving 150.000 inhabitants of Jihlava district and the surrounding areas.

The hospital has three parking areas whose entries and exits is secured by barriers that physically separate the parking lots from the public roads.

Several groups of drivers

Each parking area serves different user-groups:

- Short term parkers, such as patients and visitors that are asked to pay a parking fee in the form of a one-time payment upon leaving the car park.
- Long term parkers, doctors, nurses, office workers etc. using the car park repeatedly, and pay for parking services on a monthly basis.

For the Jihlava Hospital it was and important to fulfil the requirements of serving medical staff and other hospital employees with a maximum comfort, starting with an excellent parking service at the beginning of a working day. Uncomfortable parking may represent a significant stressful factor that can have a negative impact on efficiency and user-experience.

"For medical services, speed is crucial and it is also highly important for the operation of our organization. The GP4P parking system equipped with integrated uPASS Reach readers fulfils the requirements both for the fast passage of doctors and paramedics and for securing the car park and parking fee collection," says Alexander Filip, Deputy Director of Operations of the Jihlava Hospital.

When every second counts

Emergency vehicles represent a special case. High demands are put on their passages. An important aspect is primarily the speed of ambulances entering and exiting the hospital area. In critical situations, Automatic Vehicle Identification offers accurate response time, elimination of traffic congestion and delaying human actions and ensuring a fast and secure traffic flow of emergency vehicles.

Excellent parking solution

The parking solution for the Jihlava Hospital has been designed to support parking and emergency services. All car parks are equipped with individual components of the [Green Center's GP4P](#) automatic parking system that ensures secure access control of the vehicles entry and exit required places. To enter the car park or the hospital area, long term parkers use contactless identification credentials – plastic cards equipped with the RFID UHF chip inlay.



Entries to and exits from the premises that are used by paramedics and attending staff are equipped with the Nedap uPASS Reach long-range UHF RFID readers. Upon the passage of a vehicle, the automatic road barriers are not controlled by the terminal but by the connected reader. [uPASS Reach](#) allows very fast and reliable automatic identification of vehicles over several meters. The identification process, the barrier opening and the passage of the vehicle are performed within only several seconds. The long-range readers improves traffic flows and prevents queuing at the gate during peak times, that could have impact on safety and user-experience. Paramedics and attending personnel use a uniform identification medium – a thin passive tag equipped with the UHF RFID chip. This [UHF Windshield Tag](#) is to be glued on the inner side of a vehicle's front screen and all servicing cars and ambulance cars are provided with it. The Nedap uPASS Reach reader is capable of reading information from the tag placed behind the front screen within the distance of up to 5 metres.

As the car park areas are situated outside of the hospital, all parking technologies used do have to be resistant to all kind of seasons weather conditions, such as heath, sun, water, wind, cold, ice, etc. Obviously all parking devices installed, including Nedap's uPASS system, do have a high value of Ingress Protection (IP) and, therefore, they can be used safely in outdoor situation.



Return on parking service

The parking system in the Jihlava Hospital fulfils its main purposes. The system allows the control of traffic within the car park areas and, via tariffs, it optimizes the utilization rate of the car park capacity. The control of parking helped to minimize the parking of vehicles whose drivers used the car park only and were not interested in using medical services. The car parks are secured by automatic road barriers which prevents drivers from taking shortcuts through the area. The purpose of this is to avoid traffic congestions at the nearby crossroad. Financial means acquired from the collection of parking fees have become another income of the Jihlava Hospital that will enable the hospital to continue increasing the quality of services.

The parking system installation brings to employees increased comfort of unattended passage to and from the hospital area. For servicing and ambulance cars, the automatic vehicle identification system shows a high level of reliability. Emergency vehicles and ambulance cars can therefore respond effectively and quickly to critical events without wasting time by time-consuming entry and exit processes.