NEDAP ENABLES MOBILE ACCESS TO MULTI-TENANT BUSINESS PARK IN MOSCOW

The multi-tenant Rumyantsevo Business Park in Moscow is host to more than 40.000 employees. Rumyantsevo introduced a user-convenient solution for access control to their buildings. People traveling to the Business Park by metro use the Troika card, that is designed to pay for public transportation in Moscow. This Troika travel card can now also be used for building access to the Rumyantsevo Business Park. In addition, employees can access the buildings using their smartphone. The mobile application can be used at the parking facilities as well. This solution is enabled by Nedap's MACE, that offers reading of both traditional psychical access cards and virtual mobile ID's. The security and access control system was implemented by the Russian security integrator AAM Systems.

The Rumyantsevo Business Park is one of the largest office and shopping complexes in Moscow. Over 40.000 employees work at this multi-tenant complex in the capital of Russia. It offers more than 800 offices, shops, bars, restaurants and hotels, including the metro station Rumyantsevo. For those who travel by car, there is a parking facility for 8.000 cars.

New security and access control system
Initially, traditional low-frequency proximity card readers were installed at the turnstiles of the access points and at the entrance to the parking lot. However, as it turned out during the operation of the system, such a solution proved to be suboptimal. After extensive evaluation, the Russian company AAM Systems was chosen as the system integrator to implement the renewed security and access control system for Rumyantsevo Business Park.

"Of course, it was important for us to ensure a high level of security. But no less important was the convenience for people who work at the business park or visit it. If there is the slightest discomfort when accessing the building, this will cause a delay. With a small number of users this may not be critical. But imagine a system that is used for 40.000 people, most of whom enter and exit the building at the same time. At the parking and building entrances serious congestion would inevitably arise, which would adversely affect our reputation," explains Vladimir Yurkov, Technical Director of Security Service of Rumyantsevo Business Park.

Combined smartphone and physical card
To ensure only authorized people get access to the business park, AAM Systems installed Nedap's MACE. MACE is a mobile access platform that enables both reading mobile credentials presented by a smartphone as well as traditional physical access proximity and smart cards. The MACE virtual credentials are stored on the mobile device and issued, revoked and re-used via the MACE Admin Portal.

Employees of the business park were issued the specially designed Troika cards. These travel cards, based on NXP's Mifare DESfire smartcard technology, contain a memory area reserved for the purpose of access control, which was agreed with the Department of Transport of Moscow. This allows the employees of Rumyantsevo Business Park to use one single card to travel to work by public transportation and to enter their offices.

Besides physical access cards, gaining access with the use of smartphones is the second preferred option. The virtual mobile ID card is stored on smartphones of employees via the MACE App, using either NFC or Bluetooth Low Energy (BLE) technology. As the MACE supports combined NFC, Bluetooth Low Energy (BLE) and Mifare DESfire smartcard technology, it is the ideal platform for this application.

The read-range when using NFC is several cm, similar to a contactless smart card. When the virtual mobile ID is transmitted via Bluetooth, the reading distance can be increased to ten or more meters. Such a significant reading distance is not convenient in every situation. Using the MACE Configuration Tool, the read-range can be easily reduced. Since a part of the MACE readers in Rumyantsevo Business Park were installed on the nearby turnstiles, the reading distance was even reduced to even a few centimeters only.

User-convenient parking access

Automatic vehicle identification solutions installed at Rumyantsevo Business Park ensures authorized vehicles can get access only. Employees can choose to use their smartphone for access to the parking facility or to benefit long-range RFID. Nedap's uPASS Reach, long-range RFID based on UHF (Ultra High Frequency) technology, allows consistent reading of a windshield mounted UHF tag up to 5 meters. Both MACE and uPASS solutions prevent traffic congestion at the entrances of the parking facilities of the business park during peak times.

"It was important for us to ensure a high level of security and comfort. We were looking for a reliable, time-tested solution, which could include advanced technologies that provide maximum user-experience and increase the status of Rumyantsevo Business Park. AAM Systems and Nedap Identification Systems understand our access control ambitions," says Vladimir Yurkov.

AAM Systems is a Nedap certified business partner and distributor for Nedap Identification Systems in Russia.