



## Business Center Capital Plaza, Moscow

### *Fully integrated, scalable security system implemented at prominent Moscow multifunctional business complex*

Capital Plaza, a new modern multifunctional complex in the center of Moscow offers an optimal environment for business development and commerce. Located in a prestigious area in the heart of Russia's capital, the 49,000 square mile business center boasts the most advanced systems of life support, communications, and security supplied by leading global manufacturers. Included is a spacious underground three-level parking garage providing ample space to accommodate 385 vehicles.



### Challenge

Designed to be a world-class facility for many of Russia's prominent business organizations, Moscow's Capital Plaza required an unmatched professional security system to ensure the safety and protection of the diverse and dynamic companies headquartered at the center. One of the key elements of the business plaza would be its access control system, which would include more than 290 readers for registering visitors and company personnel as well as four remote readers for registering vehicles.

Although the system initially had to accommodate 7,000 users, it was necessary that the security solution be easily expandable with a capacity to manage up to 20,000 users per day. The selected access control system was required to monitor access to the floors and offices and register all incoming and outgoing automobile access. Furthermore, it was essential that the solution focus on protection against counterfeit credentials to ensure that only authorized personnel be granted access to secure locations.

The system's compatibility with HID Global Prox readers (previously installed at other facilities owned and operated by Capital Group) was also necessary to maintain cost efficiencies.

Above all, the scalability and expandability of the access control system was key. The comprehensive security solution had to provide an opportunity for future applications such as:

- Biometric identification (biometric template storage on a contactless smart card)
- Time and attendance
- "Electronic purse" vending machines
- Parking systems with long range vehicle access
- Medical, social personal data

### Solution

According to Igor N. Lyubivoy, deputy head of the Capital Group security service, it was important that the company ensure the prospects of the access control system's future development. Taking this into consideration, the organization outlined several criteria in governing its choices including the reliability and advanced technology of the equipment and software. Another key decision factor was the





knowledge and experience of the integrator and the potential of the system. Based on these factors, Capital Group selected to work with AAM Systems on a LyriX software-based package and HID iCLASS contactless smart card readers. AAM Systems (a leading Russian distributor of HID solutions) offers a comprehensive range of HID identification products, from proximity cards and readers to iCLASS contactless smart cards and readers.

AAM Systems recommended using the LyriX software system for the Capital Plaza in order to easily manage the integrated access control system. Several HID R40 iCLASS contactless smart card readers and HID iCLASS Prox dual technology cards were used for identification purposes. The cards contained two chips: 125 kHz proximity and 13.56 MHz contactless smart card technology. The use of the dual technology iCLASS Prox cards (proximity and contactless smart card) allowed Capital Group simple integration with their legacy systems (HID 125 kHz Prox readers). In addition, the HID equipment was easily integrated with the systems of other manufacturers. Protection and system function reliability were ensured through two methods:

- Applying the iCLASS equipment to ensure the communication channels were protected, and iCLASS cards and readers offered mutual identification
- High endurance and failure tolerance of the LyriX system ensured the iCLASS equipment was managed efficiently

“The iCLASS series devices are perfectly suitable to further expand the system opportunities, making combined use of access control and other systems working with personal data such as biometrics, parking, time and attendance, etc. much more convenient, economic and reliable,” said Alexei A. Gintse, marketing director of AAM Systems. “It is extremely flattering for us to have such a partner as HID Corporation, a leading company in the area of advanced solutions for contactless identification systems.”

For hands-free vehicle access of authorized drivers and vehicles, the parking garage of Capital Plaza was equipped with long range Nedap TRANSIT readers from Nedap based in the Netherlands. By placing an HID iCLASS Prox card in the specialized Nedap Combi-Booster device, it is possible to identify the driver at distances up to 10 meters moving at speed, while also receiving a vehicle ID. The system enables the business center to register simultaneously the driver and the vehicle entering the parking garage, offering a high level of security. Additionally drivers do not have to open their window to present the iCLASS Prox card. Separately from the Combi-Booster, the iCLASS Prox card may be used by personnel for access inside the building.

Capital Plaza management can also use iCLASS contactless smart cards for storing biometric data. Using fingerprint biometric readers, it is possible to store the fingerprints of the personnel directly on the iCLASS card.

These ample opportunities of integration and the expansion of the access control systems functionalities (which are based on iCLASS readers) enable the Capital Group’s desire to have a modern system that will solve a wide range of future tasks.

