

## Centralized Access Management at the Children's Memorial Health Institute Complex



### Investor

Children's Memorial Health Institute

### Contractor

Bit Arkadiusz Żurawski

### Manufacturer

Roger Sp. z o.o. sp. k.

### Integrations

RKDS Key Management and Tracking System

### Users

3 500

### Doors

200

**Upgrade from RACS 4 to RACS 5**

*The Children's Memorial Health Institute (CMHI)* is currently one of the largest pediatric hospitals in Poland. It was established in the 1970s to honour children from all over the world who lost their lives during World War II. Since its inception, it has acted as both a scientific research facility and a highly specialised hospital where children from all over the country and beyond are treated.

## Requirements

The CMHI building complex is constantly being expanded and modernised. Currently, it comprises 27 buildings with an area of 70,000 square metres. Every day, several thousand small patients are provided with medical care provided by about 2.5 thousand employees.

Administering such a large facility with a huge number of users - patients and staff, both medical and non-medical, necessary for the proper operation of the centre - requires limiting access to individual rooms for specific groups or even individuals. The adopted solution should enable secure, efficient management and control over who and when has access. In addition, it must be flexible enough to adapt to constantly changing conditions, such as staff rotation, outsourcing companies, and extension or modernization of the facility.

Originally, this problem was solved by using traditional keys and manual, paper registration of their issue, however, this functionality was not satisfactory. Another solution was the introduction of electronic access control systems (AC), initially in doctor's rooms and rooms for medical staff at single doors using cards as identifiers. These systems worked independently of each other and came from different manufacturers.

The breakthrough turned out to be the time of the pandemic, when it was necessary to effectively limit the possibility of free movement around the CMHI premises for both patients and staff, depending on their functions. Restricting the free movement around the facility together with the use of contactless technology to identify users was an action to prevent the spread of the virus and to raise the hygiene standard in the facility.

It became necessary to significantly increase the number of controlled passages and zones with the possibility of centralized management, including the efficient granting of authorizations to rotating users.

The implementation of the new system is being carried out in stages: by systematically migrating older systems to RACS 5 (from RACS 4 and others) as the CMHI needs and is able to do so, and by installing the system in parallel at doors that were not previously covered by electronic access control. In most cases, it was possible to use existing cabling and some of the equipment already installed. Upgrade of the RACS 4 to RACS 5 requires only the installation of new MC16 series controllers and the replacement of the firmware in the installed devices and their parameterization to work in the new system. Furthermore, the ability to export the list of users from RACS 4 and import it into the RACS 5 system significantly facilitates and shortens the time of implementing a new system.

## Solution

Due to the multiplicity and variety of access control systems, it was necessary to decide which access control system would provide the desired functionalities. A decision was made to choose a domestic solution with a good reputation, i.e. the RACS 5 access control system by Roger, whose earlier version (RACS 4) was already used in this facility. Above all, this system proved to be reliable and stable, which made it easier to choose its successor (RACS 5) as the system for the entire facility. RACS 5, in addition to the aforementioned advantages of its predecessor, is distinguished by much richer functionality and flexibility in terms of scalability and centralized management in both the hardware and software layers.

In addition, this system provides advanced access control features such as elevator access control, interlocking (e.g. at entrances to operating blocks), commission entrance, external authorization, and many more. An important advantage is its integration with the RKDS key distribution and monitoring system by Roger. This integration enables central administration of access rights to rooms and keys, from the level of one software (one database). It is a very important feature from the point of view of convenience and efficiency of access management in the facility. What is more, it also makes it possible to block a user's access at designated doors (RACS 5) if he/she fails to hand over previously retrieved keys (RKDS). This significantly increases the property protection level at the whole facility. The use of the RACS 5 system is integrated also with CCTV, enabling preview from the supervised doors.

Currently, there are 200 doors managed by the new system, which are used by 3,500 users on a daily basis. The access control system in the CMHI complex is constantly being expanded. In the near future, another building will be covered by the RACS 5 system: the Center of Psychiatry and Oncology of Children and Youth.

Central access management to premises and keys

Integration with the RKD32 electronic key cabinets



200 doors

3500 users



Upgrade from RACS 4 to RACS 5

## Benefits

The decision to replace a number of different access control systems with a single system proved to be the right one, bringing CHIM a number of benefits in many fields. The main one is the unification of hardware and software from a single manufacturer, combined with centralized management of the access control system, which has significantly facilitated its operation and reduced administration costs while increasing the level of security throughout the complex.

Currently, the possibility of efficient user management (adding, deleting, and modifying access rights without disrupting the system's operation with a high staff rotation - up to 20-30 people every fortnight, issuing several new cards a day, as well as handling temporary employees/companies - outsourcing) allows CMHI to administer the system independently, despite the fact that it is used by several thousand people daily. As a result, CMHI has gained full control over the movement of people and access to the premises in each location where the implementation was carried out.

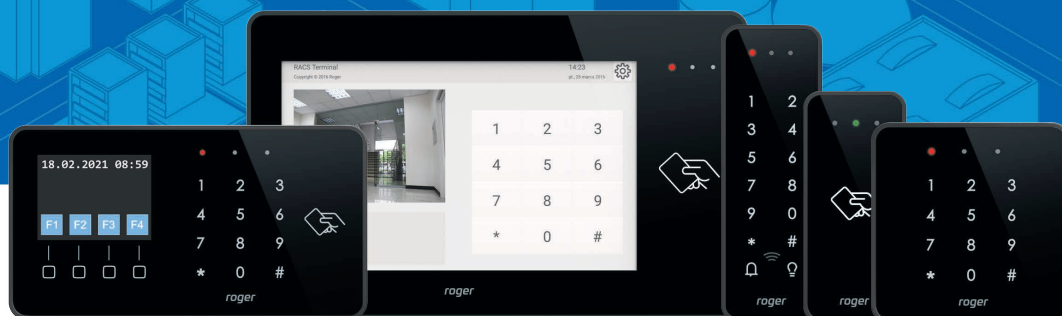
The adopted solution using proximity cards for user identification and the application of advanced access control functions (e.g. interlock) made it possible to increase the level of hygiene by limiting contact with potential sources of contamination and infection.

The scalability (in terms of the number of doors and users) and flexibility of the solution enables expanding the access control system, without disrupting the operation of the facility, also when using new functionalities and products from the Roger range (e.g. electronic key cabinets).

Another important benefit was the ability to upgrade the access control system from RACS 4 to RACS 5 using existing equipment and cabling, which significantly reduced the investment cost.

For the CMHI, which provides continuous medical care for the youngest patients, a significant advantage over other solutions is the reliability of the equipment, the stability of the system, and the manufacturer's direct support during installation, implementation, and operation - especially its availability and response time. As a result, problems are resolved without unnecessary delays and the facility can continue its operations without interruption while maintaining the necessary safety standards.

As part of its support for the idea of the „Monument - Child Health Centre” Institute, the Roger company donated the access control for the fourth floor of the General Surgery. The equipment was used to secure 27 doors. The installation was carried out, also as part of CMHI's support, by Bit Arkadiusz Żurawski company.



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