Axis cameras supervise students' security, and help prevent crime.

VUT in Brno is protected by a certified surveillance system.

**Mission**
The base requirement of Brno University of Technology (VUT) was analysis of the state of the surveillance system in the school building, its reconstruction and upgrade. New standards in the area of personal data protection including legislation had to be considered. The final objective of VUT was to obtain registration of the school surveillance system from the Office for Personal Data Protection.

**Solution**
The reconstruction process and supplementation of the surveillance system was proposed using the process analysis. New locations that had not been monitored before were proposed for the VUT premises. The original recording devices were checked and kept in the new installation. The surveillance system stresses e.g., increased supervision over stored students' items during classes in special premises and labs.

**Result**
Comimpex evaluated the state of the surveillance system and about 12 network Axis cameras were kept in the newly installed circuit. AXIS 2100 Network Cameras, have been in place and working since 2004 with 11 years of continuous operation and are still delivering video records of good quality. Outdoor cameras were added and AXIS P1354-E was chosen for this purpose, which was supplemented with external housings. The total number of cameras in a combination of old and new models is currently between 30 and 35 pieces. The surveillance system is available in online mode at the school’s reception desk. Registration of the surveillance system at the Office for Personal Data Protection allows access only to a limited number of authorized staff members. For VUT, records are handled by the campus administrator, who is able to mediate them in the required output to the respective individuals or bodies.
“Our company had evaluated the state of the surveillance system and we had found 12 AXIS 2100 Network Cameras to be in good shape even after 11 years of continuous exploitation. Therefore we prepared a report, stating that they did not have to be replaced because they work and reliably deliver video recordings in locations where high definition details are not emphasized.”

Jan Hotovec from Comimpex, system integrator and Axis partner.

Crime prevention and students’ security at school
Based on the report about the surveillance system status at Brno University of Technology, the situation was evaluated and reconstruction of the system with regard to the new technical standards and legislation, especially in the field of personal data protection, was proposed. The whole surveillance system was uninstalled, checked and supplemented with new cameras. New locations that had not been monitored before were proposed for the VUT premises. Some cameras were moved from places where they originally monitored resting locations. New places that needed to be continuously monitored and secured were proposed. This particularly involves cloak-rooms or rooms where money or valuable materials are collected.

Combination of old and new cameras is possible
The original recording devices were checked and kept in the new installation in places where detail was not of the highest importance as the highest available resolution is only 640x480 pixels. Nevertheless AXIS 2100 had become the most widely used surveillance network camera at the beginning of the new millenium. It has high reliability in usage and is easily installed and configured.

Outdoor cameras with external housings to protect the devices in case of severe weather conditions were added. AXIS P1354-E Network Camera was chosen. The total number of cameras in a combination of old and new models is currently between 30 and 35 pieces, with twelve completely new ones. The basic interface of the surveillance system is located at the school reception desk. If a recording has to be found, the school building administrator is contacted, who then obtains the recording from the system storage. It is important to point out that the system is reserved only for the authorized staff members in terms of access.

The surveillance system has a marked practical use e.g., in surveillance over stored items of students when they leave for the laboratory rooms. The system is already prepared for integration with the attendance system to the VUT building, which currently works independently.

The law is relentless, it secures personal data
Surveillance systems are often problematic in terms of privacy protection. In the past, it was the trend to deploy cameras in public locations, corporate headquarters and offices, without adhering to clearly established ethical rules. A special law for personal data protection addresses these issues and registration is required in some cases for operation of a surveillance system. However, provisions of civil law may also apply to camera recordings. Data kept in a recording device, both image and sound, is actually personal data. This applies provided that a particular individual can be directly or indirectly identified based on these recordings. Problems with vandalism were addressed in the buildings of Brno University of Technology, since there were vandalism incidents, and similar problems occur frequently. In contrast to the past, it is now possible to identify offenders based on camera recordings. In the interior, students have lockers for storing personal items. There are also occurrences such as pick-pocketing and theft. Thanks to the surveillance system it is expected that occurrence of such incidents will significantly drop or even stop.