"Erfurt" Housing Cooperative:
Much More Than Just A Home

MOBOTIX
C A S E   S T U D Y

"Erfurt" Housing Cooperative: Better, Safer Living

Better, Safer Living

During the German Democratic Republic (GDR) times, enormous housing complexes often sprang up overnight - buildings that in their original condition today would be neither architecturally appealing nor offer tenants an attractive environment in which to live. However, it does not have to be this way, as proven by the residential complexes at Györer Straße 1-4 and 5-7 in the north of the Thuringian regional capital of Erfurt. After the fall of Communism, the buildings were modernised to the latest standards with regard to insulation, plumbing, windows, elevators and external look by the "Erfurt" Housing Cooperative (www.wbg-erfurt.de). Balconies added to the south side of the building have significantly increased the housing quality of the one- to four-bedroom apartments. Residents can now enjoy the fresh air while looking out over the spacious and carefully maintained green areas.
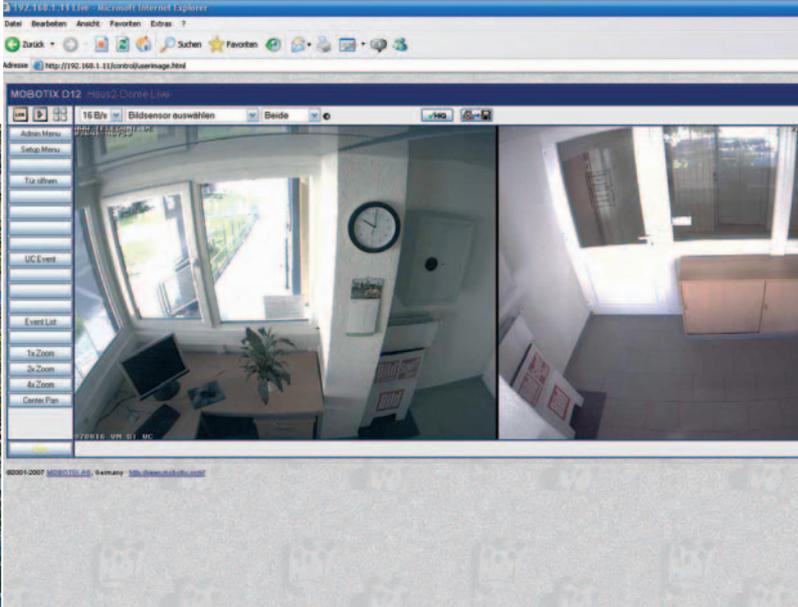
However, many of the 1,500 tenants and members of the cooperative were not entirely satisfied with their homes. The tenants often had to live with disruptions to the community's peace caused by homeless people sleeping in the cellar, graffiti scrawlings, car break-ins, doorbell pranks, night-time noise, newspaper theft from mailboxes and many other incidents that are practically unavoidable in housing units of this scale without suitable countermeasures.

Security Creates Trust

For some time, the cooperative had been using video surveillance in a similar building complex to improve the actual and perceived safety of the tenants. However, the quality of the analog camera technology that was used there was not satisfactory - it was inflexible in its application, complicated to operate and unreliable in operation. The new concept presented by MOBOTIX-Secure-Partner TELEGANT GmbH from Jena (www.telegant.de) quickly convinced the decision-makers at the "Erfurt" Housing Cooperative. Optimum user benefits, low operating costs and excellent value for money helped to close the contract. TELEGANT has been actively working in the field of electronic security and entry control systems since 1990 and is certified by VdS Schadenverhütung (an independent testing and certification institution for loss prevention) as an installation company for security systems.

Security-Vision-Systems

MOBOTIX

The MOBOTIX video management software **MxControlCenter** (incl. layout editor, event search, image post-processing, snf support for analog and digital PTZ cameras) is delivered free of charge with every camera.

MOBOTIX HiRes IP Video Technology For Safe Living

The Concept

Each of the two housing blocks at Györer Straße 1-4 and 5-7 received a porter's lodge, which is manned by a member of

staff from a surveillance and security company 24 hours a day on a weekly alternating basis. The porter is provided with a full view of the entrance area by innovative, IP-based megapixel camera technology from MOBOTIX. The TELEGANT Concierge Video Monitoring System which is based on this technology would not be possible with

conventional analog video solutions. That is why TELEGANT developed an easy-to-use, but comprehensive surveillance system especially designed for residential complexes.
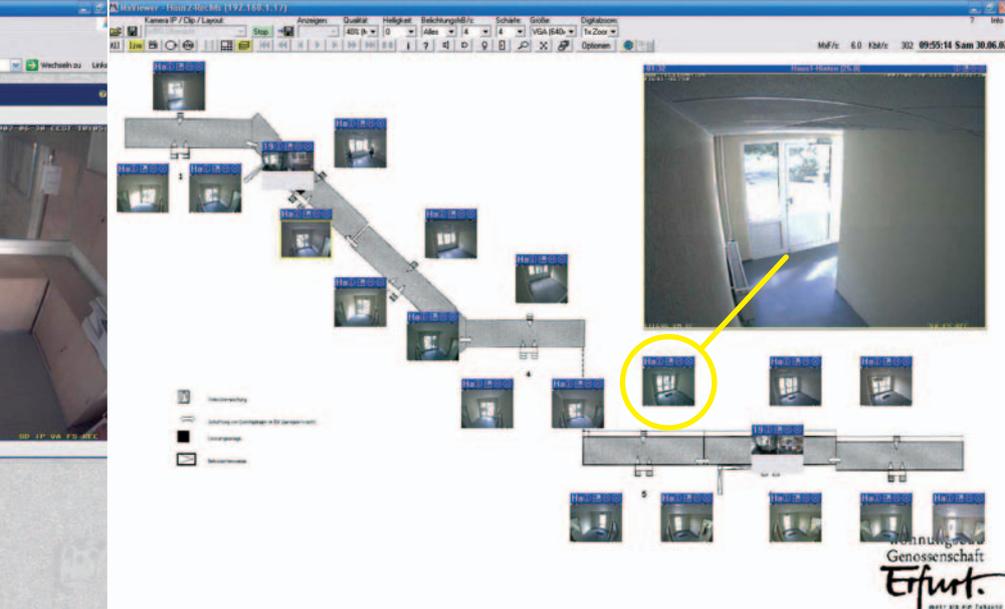
The basic concept was developed by TELEGANT's Managing Director Michael Rodmann and then optimised in cooperation with the "Erfurt" Housing Cooperative. The technical potential of MOBOTIX camera technology, the individualism and ambition of an entrepreneur and the experience of a housing construction company make such a sophisticated system possible – one that allows as much freedom as possible but also performs as many surveillance tasks as necessary. For the housing industry, it is an ideal platform for increasing the attractiveness of its properties. The Mitteldeutsche Rundfunk MDR

(Central German Broadcasting Station) reported in detail about this project in a film report. The overwhelming majority of the people interviewed confirmed: "We feel safer and happier with a porter and camera surveillance." This comes as no surprise since the porters not only ensure the safety of their residents but also perform a host of additional services: accepting parcels and repaired items, selling newspapers, stamps, public transport tickets, sending faxes, photocopying, watering plants for residents while they are away, emptying their mailboxes, and much more. In this way, they make life easier for working people and are also a permanent point of contact for the elderly. The circumstances that were complained about have rapidly decreased as a result of these measures, which has naturally contributed towards acceptance of the measures in place.

Cameras In Critical Places

The TELEGANT project manager, communications electronics engineer Dennis Nitschke, installed nineteen M22 Secure cameras both indoors and outdoors in carefully selected locations and a D12Di-Secure camera in the porters' lodges. Surveillance focal points are the entrance doors and the main hallways behind them, the elevator doors on the ground floor, the front and rear of the buildings and the mailbox areas. Each porter's lodge is fitted with identical technology, consisting of a PC with an alarm memory and

MxControlCenter with building layout plan. In the event of an alarm, the MOBOTIX camera images are highlighted in colour and can be displayed as a full-screen picture at the click of the mouse.

flat-screen monitor. The monitor image shows the layout of both buildings and small surveillance images are displayed on the screen at each of the camera locations. If one of the freely-definable alarm criteria, such as movement or sound, occurs in the image, a red flashing frame notifies the member of staff from the security service. With a single mouse click, they can display the relevant camera image as a full-screen picture and react accordingly. The image or sequence of images is simultaneously recorded for later analysis, which in one instance has already helped towards solving a crime.

Intercom Included

When it came to implementing the functional requirements, Dennis Nitschke added some useful features to the system. The speakers installed in all cameras can e.g. be used for targeted announcements by the security guard. At the touch of a button, postmen and residents can register themselves at the entrance doors and be let into the building via the electric door opener. This feature is also enabled by the MOBOTIX camera in combination with an additional module specially developed by TELEGANT.

The outstanding sharpness of the camera images means that people can be easily identified. In cases of doubt, a brief conversation between the person and the porter via the camera can quickly clarify the situation. Incidentally, these functions are entirely possible via the built-in features in the high-resolution MOBOTIX cameras at minimal additional cost. High-performance solutions of this kind are simply impossible with conventional analog camera technology.

Network With Wireless Integration

A particularly challenging task in the project was connecting the two separate building complexes. Networking them together with twisted-pair cab-

les would only have been possible at great technical and financial expense. Therefore, the decision was made to use a reasonably priced and reliable WLAN radio bridge which links both building networks together into one system without compromising performance. The possibility of supplying power to the cameras via the Ethernet (Power over Ethernet: PoE) was seen as particularly convenient - which is where the highly reliable power racks developed by TELEGANT came into use. This solution, which is specially tailored to MOBOTIX network cameras, offers a particularly high level of system stability through its redundant design. Thanks to PoE, savings can be made on cabling costs, while the low power consumption of the cameras also makes for much lower electricity bills throughout the system's lifetime. The administration software which is provided free of charge by MOBOTIX is yet another good reason for choosing the cameras.

Satisfaction All Round

Everyone involved is extremely satisfied with the solution that has been found. The "Erfurt" Housing Cooperative is especially pleased as it now has a solution for increasing safety in its leased properties in Györer Straße at comparably low costs. The system can even be extended at a later point if required. The result is increased value and acceptance of the properties through a greater sense of contentment among the tenants.

One of the porters, Hartmut Wiegand, was impressed how, as an almost computer illiterate, he was still able to use and operate the system without difficulties. TELEGANT has been able to sharpen its profile as a competent system partner that has impressively "refined" the sophisticated high-end camera technology from MOBOTIX into a solution tailored to its customers. With this reference project, the company has encountered wide interest in the housing industry. And now that they have more security in their home environments, the residents certainly feel much happier than before.

D12 Dual-Fixdome Outdoor

D22 Mono with in-ceiling mount

Covers RJ45 wall outlets

M12 Day/Night

Microphone

Speaker

Motion detector

M22 Mono/CF

MOBOTIX Technology:
Cost Savings In Every Aspect

High Resolution For Sharp Images

All MOBOTIX cameras are high-resolution cameras with integrated image storage and up to 1536 images lines and 2048 horizontal pixel resolution. The **stored image** thus contains 30 times more detail for creating zoomed sections of the image than regular cameras with 288 lines (CIF, 2CIF). This is why one single MOBOTIX camera with a 90° super wide angle lens is sufficient to monitor an entire room and yet provides more detailed images than traditional technology. The MOBOTIX Day/Night cameras feature zero maintenance with one color and one B/W image sensor.

Intelligent Storage Technology Uses Fewer DVRs

The new, decentralized storage technology pioneered by MOBOTIX reduces the number of recorders that store the smooth high-resolution video by up to 90%. Up to 40 cameras store smooth video streams, including audio on a single PC, with every camera managing its own ring buffer and image database. Intelligent search features provide swift access to the stored events. The professional MxControlCenter software with research functions is available free of charge, no licences required. Event-controlled recording and automatic increase of frame rates upon detecting movements drastically reduce the storage requirements.

Low Power Consumption Means Enormous Savings

Since MOBOTIX cameras are anti-fogging, do not require heating and only use 3 Watts each, power can be injected into the network cabling using standard PoE products, year round. This drastically reduces the amount of cables and the power requirements for backup power.

Integrated Telephone Features

All MOBOTIX IT and Secure models feature bidirectional audio support. The built-in microphone and loudspeaker are used for live audio transmissions and storage purposes. Voice messages with PIN confirmation and call forwarding via IP or ISDN telephony have been integrated as well. Using the switch outputs, you can switch lights or open doors from the phone or from the computer.
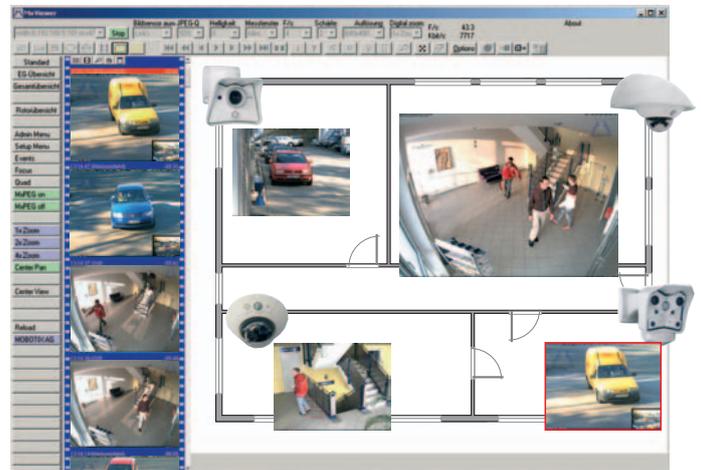
Robust And Well-Protected

The fiberglass-reinforced housing is shockproof and, together with the concealed cable duct, protects both the camera and the network cabling against damage. Weatherproof (IP65) from −30° to +60°C (-22° to +140°F).

High Return On Investment

Since the number of cameras and storage capacity are freely scalable and any kind of data connection can be used (ISDN, DSL, Ethernet, Wireless, GSM, copper, optical), MOBOTIX means high ROI, even years after installing.

State-Of-The-Art Technology

Developed and manufactured in Kaiserslautern, Germany, MOBOTIX produces image-storing weatherproof high-resolution cameras, including lens and wall/ceiling mount- for as little as 598 EUR ($798) excl. VAT. To date, more than 100,000 cameras have been sold worldwide.

MxControlCenter alarm management software: free of charge with each camera - no restriction on camera type, layout editor or research functions

MOBOTIX AG
Security Vision Systems
Luxemburger Straße 6
D-67657 Kaiserslautern
Tel.: +49 (631) 3033-103
Fax: +49 (631) 3033-190
E-Mail: sales@mobotix.com
www.mobotix.com

Security-Vision-Systems

MOBOTIX.com