79 824

GIT SECURITY EMEA

MAGAZINE FOR SAFETY AND SECURITY

Security for Airports

Fire Protection

Industrial Safety

Securing Critical Infrastructure

IFSEC 2022

COVER: Dallmeier:
Domera – Beyond the Image

WILEY

Dear Readers,

I don't have to tell you what the whole industry is talking about: Who can deliver? Who produces where and, above all, how much and how long will the stocks last? Supply chain issues have been on everyone's lips since the Corona crisis and the escalation of the war in Ukraine. Many companies have supply bottlenecks or are on the verge of not being able to deliver. Those that can still do it at least don't let their customers know of it, but behind the scenes it's bubbling and many employees are trying to make everything possible so that the demands can be met and customers are satisfied. Rumor has it that some manufacturers who need electronic chips are turning to other sectors and buying entire washing machines in order to then remove the circuit boards.

Logistics also plays a major role in this GIT SECURITY issue. Starting on page 43, we address this topic in relation to security technology: Mirasys has a number of user scenarios in the logistics sector in particular that might be of interest to you. There is a perimeter application story from Abu Dhabi: The Khalifa Port has been equipped with a new system (p. 45) and starting at page 46 Euralarm comments on the topic with an industry outlook.

Logistics and production are in many ways a huge issue in the fight against climate change. For example, do work clothes have to fly around the world before they are ready for production? Many manufacturers are now facing up to their responsibilities when it comes to green production. This is also the case with Ansell, who are filling our "Green Pages" this time: You can read why they have now written an open letter to EU regulators starting on page 28. May is GIT SECURITY AWARD season! Our jury has once again chosen the best products from the entrants, so you, dear readers can now vote online at www.security-award.com from May 15 to August 15. Look through the categories and rate your favorite products.

That was just a little taste, now I hope you enjoy reading.

Stay safe!

Lisa Holland

Lisa Holland for Wiley's
Safety and Security team

COVER STORY

Welcome to the knowledge age

Wiley builds on its 200-year heritage by
partnering with universities, businesses,
research institutions, societies and individuals
to develop digital content, learning, assessment
and certification tools.

Wiley continues to share and deliver the
answers to the world's challenges helping
you to further your mission.

WILEY

New Senior Vice President for Assa Abloy Opening Solutions

David Moser has been appointed as Senior Vice President & Head of Digital Access Solutions EMEIA. He succeeds Stephanie Ordan in the post, who became Executive Vice President & Head of ASSA ABLOY Global Solutions late in 2021. David's role will focus on continuing to strengthen ASSA ABLOY's position as the leader in access control solutions across EMEIA. He will oversee the continued efforts in market education and exciting product developments. David joined ASSA ABLOY from the automotive industry, where he held several international management positions in product development and management, operations and marketing. David joined ASSA ABLOY in 2017 where he has held the role of CTO and Vice President of Product Innovation for the last four and a half years. **www.assaabloy.com**

Suprema appoints new President

Suprema, a global provider of access control, biometrics and time and attendance management solutions, has appointed Bob McKee as new President of Suprema America. McKee brings over 45 years of experience in the electronic physical security sector to this new role and will be responsible for leading Suprema's North America business and its operations in the US. Prior to joining Suprema, McKee held key executive positions with major and global security companies including Cardkey Systems, Paxton Access, Hanwha Techwin (formerly Samsung Techwin), Pelco and Princeton Identity. He also served multiple terms on the board of directors for SIA (Security Industry Association). Suprema America has been steadily growing since its establishment in 2019 with BioStar 2 access control platform, facial recognition, fingerprint readers, RFID readers and mobile solutions. **www.supremainc.com**

BSRIA appoints Nicola Fallowfield-Smith as Business Manager

BSRIA announces the appointment of Nicola Fallowfield-Smith as Business Manager for its Worldwide Market Intelligence (WMI) division. Nicola, a Chartered Engineer with a Master's Degree in mechanical engineering, brings a wealth of technical expertise to the team, along with years of experience in fostering strong relationships and shared insight. Krystyna Dawson, BSRIA Commercial Director, said, "It is with great pleasure that I welcome Nicola Fallowfield-Smith to pick up the WMI leadership baton." BSRIA Worldwide Market Intelligence has been providing specialist market intelligence services for over 30 years. WMI provides in-depth understanding of global HVAC, refrigeration and building controls markets and supports organizations in developing their strategic responses to technology trends and quickly evolving markets. **www.bsria.com**

i-PRO EMEA Bucks the Industry Trend

With the wider industry facing component shortages and rising prices, i-PRO has introduced a new quick delivery service with availability 2-4 days from the European warehouse and 2-4 weeks from the factory. It has also confirmed that prices will remain unchanged for all i-PRO camera line-ups, including the AI-enabled models, despite global pricing pressures. In response to customer demand for more flexibility in installation, the company has also added its first i-PRO branded black security camera models. "At a time when the wider industry is struggling to meet market demand and facing constant rising prices, i-PRO EMEA is bringing certainty and offering stability to its partners and customers," said Gerard Figols, i-PRO EMEA President. "We have secured the essential components we require and are confident in our delivery capabilities – allowing partners and customers the opportunity to focus on their own business with certainty." **www.i-pro.com**

Onvif Celebrates 10th Anniversary

Onvif is celebrating 10 years of Onvif profiles based on the profile concept. From the first profile, Profile S in 2012, to the more recent Profile M introduced in 2021, the profile concept has enabled product conformance and widespread interoperability between physical security products for the last decade. Onvif profiles will be highlighted at the Onvif Booth L0 at the upcoming ISC West 2022 security exhibition from March 23-25 in Las Vegas. Since the introduction of Profile S, which remains the most widely adopted profile to date, Onvif has introduced several other profiles that include video and audio streaming, recording and storage, access control and video integration, access control peripherals and metadata handling. At ISC West, Onvif member companies will be showcasing their Onvif conformant products at various booths throughout the show floor. **www.onvif.org**

Train to Gain

Life-safety systems manufacturer C-TEC has launched a new series of BS 5839-1 fire detection and fire alarm system compliance courses. Delivered at the company's state-of-the-art training center in the north west of England, the courses include both theoretical and practical activities. Thoroughly covering BS 5839-1 foundation, design, installation and commissioning and maintenance, the courses can culminate in a regulated qualification in BS 5839-1 through FireQual, the specialist awarding body for the fire protection sector in the UK. Each course will be delivered by highly experienced and qualified trainers in line with the technical requirements of the awarding body. Delegates will undergo hands-on practical assessments to ensure they understand the subject matter and display the necessary competence to attain the regulated qualification. Successful delegates will be issued with CPD Certificates for each module and those who pass a final exam will be awarded a regulated qualification certificate from FireQual. **www.c-tec.store**

Milestone Systems Introduces New Partner Program

Milestone Systems has announced enhancements to its Partner Program that are designed to maximize partner success, help partners compete in a constantly changing market, and provide more enhanced profitability. The enhancements include a transparent three-tier program design, partner status by country level, expanded program benefits and partner rewards, introduction of growth rebates for top tier partners, and realigned participation requirements. The new program will launch and go into effect on July 1, 2022. "Milestone is and will remain a partner-centric company. We are fully channel driven, and we're committed to deepening our relationships with our partners. Through this new program, we will help our partners thrive and grow as they take advantage of this tremendous and differentiated market opportunity," said Bill Rainey, vice president of global channel strategy. **www.milestonesys.com**

The Physical Security Industry Embraces New Technology

Genetec has shared the results of its state of the industry report. Based on insights, the report looks at how the role of physical security changed in 2021. Physical security continues to evolve from being seen as a tool for mitigating risk, to playing a much more significant role in organizations' digital transformation. The survey showed that more than two-thirds (69%) of respondents described physical security and related data as "mission-critical". Cloud-based solutions that enable organizations to remotely monitor video, control cameras, assess system health, perform maintenance, and update firmware/software have become invaluable. The survey showed that 45% of larger organizations have already adopted cloud solutions. A massive 94% of respondents said they have plans to deploy cloud or hybrid cloud solutions in the long term. **www.genetec.com**

State of Physical Security
Insights from 2000+ physical security professionals

The changing role of physical security

69% of respondents described physical security and related data as "mission-critical"

51% they had invested in video analytics

An accelerated move to the Cloud

Access control investments are rising

94% of respondents said they have plans to deploy cloud or hybrid cloud solutions

52% of respondents plan to invest in access control over the next 12 months

Genetec, surveyed physical security professionals from October 06 to November 06, 2021.

Genetec

Ajax Systems Remains in Ukraine and Prepares for New Product Launch

Since the outbreak of the war in Ukraine, Ajax Systems does not sit idly by, waiting for peace. Instead, the company is doing everything necessary to ensure the protection and safety of its people, business and supplies to partners. So far, Ajax Systems has relocated over 600 employees along with their families to safe regions in Ukraine and Europe. The manufacturer also does everything to ensure that its own and partners' businesses work as usual. Right now, the company is in the process of relocating the stocks of finished goods and relaunching its production facilities. The regular shipments to partners were renewed. Speaking of the existing systems, the Ajax server infrastructure function without interruption, so users and partners don't have to worry about the stability of already installed systems. Ajax's servers are geographically dispersed throughout Europe in Amazon data centers in Ireland and Germany. The company also continues working towards launching new products. **www.ajax.systems**

Bosch Upgrades Telford Shopping Center

Bosch Building Technologies has installed a digital public address and voice alarm system at Telford Shopping Center in the UK. The IP-based Praesensa system now provides music, announcements, and emergency alerts for retail stores, restaurants, as well as hotels and a cinema. Security staff now control the public address system via an intuitive touch screen interface. Managed via OMNEO media networking technology, the software-based system combines live broadcasts and recordings from various media sources, including background music in MP3 format, commercials from a message database, plus end-of-day mall closing messages on automated schedules. The public address system integrates with the fire alarm system to play pre-recorded alerts and evacuation messages. Praesensa achieves a low energy footprint via smart power partitioning across amplifier channels. The software adapts intelligently to loudspeaker loads and divides the available output power across all channels. This built-in function significantly lowers overall power usage over the system's lifetime, especially in the idle state where most systems spend most of their time. Praesensa also delivers automated fault notification to the control desk within 100 seconds, thereby meeting EN54-16 standards for public address systems. **www.boschbuildingtechnologies.com**

Former Student Presents Belfast College with Donation from Dahua

A college in Northern Ireland has benefitted from a donation of high quality video surveillance equipment from Dahua Technology. Belfast Metropolitan College, one of the largest further and higher education colleges in the UK, provides a number of fire and security systems courses. These include a Level 3 diploma in electronic fire and security systems, a four-year full-time apprenticeship programme which works with major providers in the security industry. Other courses include a foundation degree in cyber security and networking infrastructure, and higher level apprenticeships in cyber security and networking infrastructure and in IT networking infrastructure. Dahua's Business Development Manager, Ross Kane – a former student at the college who studied for an NVQ in intruder alarm systems for three years and now teaches there – presented the equipment to the college. It included TiOCs (three-in-one cameras) which feature full colour imaging, intelligent perimeter protection and active deterrence; a range of digital and network video reorders; IR eyeball and PTZ network cameras; and accessories such as hard disk drives and junction boxes. Ross and his team are providing full training on the equipment and will also be advising on the CCTV element of the course. He said: "I am delighted to be able to present this equipment to Belfast Metropolitan College, and I feel by doing so I'm giving something back to the place where I started my career, and about which I have happy memories." **www.dahuasecurity.com**

Milestone Management Server Failover

With the introduction of Milestone XProtect Management Server Failover as an add-on product in 2022 R1, users will be able to keep their systems up and running without disruption. Several new features and capabilities have been introduced in the latest update of the XProtect 2022 R1 video management software. These include a Management Server Failover solution, single sign on in XProtect, and a new selection of choices ranging from multi-live streaming, adaptive streaming, and direct-streaming. The solution protects the management server (and the SQL server when installed on the same physical server) from hardware, software, and human error server failures. It assures operators can log in to the system and access live and playback video as well as the system's configuration at all times. Users can switch to a reliable backup management server seamlessly and automatically if the primary one fails. It provides synchronous real-time file replication, automatic application failover, and automatic failback after a server failure, all in one solution.

www.milestonesys.com

Euralarm President Jon Könz selected for the Cen-Cenelec Industry Advisory Forum

Jon Könz, President of Euralarm, has been selected as a member of the Cen-Cenelec Industry Advisory Forum. The Industry Advisory Forum consists of 18 members who were selected, based on their particular experience and knowledge in the identified Cen-Cenelec Strategy 2030 areas and European Industrial Ecosystems. Via the Industry Advisory Forum (IAF) high-level European industry representatives and Cen and Cenelec can have an open exchange on current standardization issues and identify and advise on standardization priority topics for the European industry. Besides the Forum can express suggestions, expectations and concerns to identify common solutions. By providing advice to the Cen and Cenelec corporate governing and advisory bodies and proposing medium- and long-term industry-driven standardization objectives for Cen and Cenelec, the Industry Advisory Forum (IAF) contributes to reaching and successfully implementing the Cen and Cenelec strategic objectives. These objectives support European industry's priorities, challenges and expectations from standardization. "We are living in exciting times, with digitalization and sustainability as both opportunities and challenges. I'm proud that on behalf of Euralarm I can contribute to the synergies between policy and standardization and the green and digital transition," said Jon Könz about his selection in the Cen-Cenelec Industry Advisory Forum. The IAF members are appointed for a three-year term and are selected on the basis of their high managerial level, relevant know-how on standardization, expertise in one of the identified priority areas, sectorial balance across Cen and Cenelec, representing both SMEs as well as large industries and adequate geographical and gender balance.

www.euralarm.org

Senstar Opens Software Development Branch in Romania

Senstar has announced it has opened a software development branch in Timisoara, Romania. A team of highly skilled developers and quality assurance specialists will focus on advancing Senstar's software solution portfolio. "The addition of new talent and perspectives in Europe will help strengthen the Senstar Symphony Common Operating Platform with Sensor Fusion Engine roadmap and expand the market for our premier software platform," said Director of Software Development Bogdan Moldovean. "Romania offers a large pool of technical talent with a reputation for high-quality software development services. Having a development center in the EMEA region will allow us to holistically address our customers' unique needs and subsequently develop related products and solutions." The Senstar Symphony Common Operating Platform is a modular solution for security management and data intelligence. In addition to being an open, highly scalable video management system with built-in video analytics, it includes full-featured access control and perimeter intrusion detection modules. But what truly sets Senstar Symphony apart from other systems is its Sensor Fusion Engine. By intelligently combining low-level sensor data with video analytics, the sensor fusion engine achieves the highest levels of performance, far beyond that of the individual devices. Senstar Symphony seamlessly incorporates sensor fusion, event algorithms, and rule-based actions to provide unmatched capabilities, flexibility, and performance.

www.senstar.com

Digital Barriers Helps Bogota Police Tackle Crime on Transportation System

Digital Barriers has announced a new contract with Bogota's Police force to provide its BW600 body worn cameras for use on the city's mass transportation system. The BW600 is a low bandwidth body-cam capable of streaming live video and audio over cellular and Wi-Fi networks, without latency or corruption. Digital Barriers' unique technology typically requires 50 percent to 75 percent less bandwidth when streaming live video. The Bogata Police will deploy the cameras to support officers working on the TransMilenio system to help tackle rising crime across the transportation network. The body-worn devices will be used to support the existing network of fixed cameras across the system and will be linked to the TransMilenio central command. Commenting on the move, Claudia Lopez, Mayor of Bogota, said: "This is an important development and we believe that these cameras will help us address crime on the transportation systems and help us take care of our citizens." Around 100 members of the Bogota Police, from the TransMilenio Command will be the first to use the cameras in the field. "These cameras will really help, when someone does something wrong, proof is needed," said Police General Eliecer Camacho. "Images from the cameras will provide evidence and help to bring to justice anyone who commits a crime." Zak Doffman, CEO of Digital Barriers, commented: "We are proud to support Bogota's police in helping to protect its citizens. This is the only bodycam capable of live streaming over cellular networks in real-world conditions, and that makes all the difference to front line officers. Our technology is a proven deterrent to crime and has been successfully deployed by police forces across the world."

www.digitalbarriers.com

See where unified security can take you.

93% of organizations that moved to a unified platform saw a decrease in compatibility issues across their security system. This is why our Security Center platform excels. It delivers a cohesive operating picture through modules that were built as one system. So, whether you're securing an airport, a parking structure, a multi-site enterprise, public transit, or an entire city, you can access all the information you need in one place. This is unification.

To learn about the benefits of unifying your security operations visit genetec.com

Genetec™

Light Middle East and Intelligent Building Middle East in January 2023

Messe Frankfurt Middle East, the regional subsidiary of Messe Frankfurt, is to co-locate two of its leading exhibitions in Dubai to capitalize on visitor and exhibitor synergies: Light Middle East and Intelligent Building Middle East, the region's premier dual exhibition, conference and awards for lighting, design and technology; and Intersec, the emergency services, security and safety event, will now run side-by-side at the Dubai World Trade Centre from 17-19 January 2023. "This is a strategic move to maximize visitor and exhibitor engagement with both events sharing important visitor groups and interests across system integration and installation, facilities and building management," explained Christine Davidson, Group Exhibition Director of Messe Frankfurt Middle East. "With the two events taking place at the same time visitors will be able to take in the entire systems integration range under one roof. We're creating a powerful event alignment featuring more than 1,200 exhibitors from 60 countries." Messe Frankfurt Middle East says the dual trade platform will find greater traction amongst corporate real estate, facilities management, building owners and operators and IT departments who stand to benefit greatly from the use of building intelligence in order to meet space optimization, energy efficiency and connectivity challenges.   **www.uae.messefrankfurt.com**

Comelit-PAC at The Security Event

As the industry once again welcomed back The Security Event, founding partner Comelit-PAC successfully inspired customers, presenting latest smart solutions in stylish security and fire safety. On stand 3a/B10, Comelit-PAC's team was together as one since the acquisition, highlighting the latest networked access control systems together with door entry, CCTV, home automation, intruder alarm and fire detection systems. Visitors to the stand were able to see latest combined solutions, including PAC's 512DC intelligent 2-door access controller and Access Central, which stands as a powerful software management platform, together with an innovative range of I/O Modules and readers. Says Francesca Boeris, Managing Director of Comelit-PAC: "The Security Event really represented an opportunity for Comelit-PAC's team as a whole to come together as one, ready to showcase our very latest in smart security and fire safety solutions. And this was across IP access control, home automation, CCTV, fire and intruder alarm portfolio.   **www.comelitgroup.com**

Commend Enhances Video And Audio Interoperability with SureView Partnership

Commend Americas announced that it has completed its integration with SureView Systems to enable global organizations to unify audio and video in order to improve security response. The combination of Commend's unified communications technologies with SureView's command and control platform allows joint customers to tap into new opportunities to combine audio with critical security data and monitor mission-critical environments with increased reliability. SureView's platform consolidates a wide range of security, business, and IoT solutions into one interface to improve response and situational awareness. By combining audio and command center functionality into one platform, organizations gain a complete view over a facility's security infrastructure while enhancing the protection of people and assets. "Our strategic partnership with Commend empowers us to provide more communication options and features to address our customers' evolving security requirements," said Sean Garcia, SureView's Director of Enterprise Sales. "By integrating with Commend's unified communications offerings, we can provide customers with a layered security solution that delivers greater awareness to manage security risks more proactively."   **www.commend.com**

Fire Safety for Italy's Leading Food Production Sites

Hochiki was chosen to install and manage their innovative fire safety systems at a site of one of Italy's leading food production companies, Parmareggio Spa. In 2021, the site at Sommacampagna required an upgrade of the fire detection system. Hochiki were the appointed manufacturers to supply the life safety system and devices due to their experience and expertise in the Italian fire safety market. Within food production sites, the temperature and humidity inside the environment must be carefully controlled to comply with food hygiene laws, and because of this, these sites can be notoriously complex buildings to design and install fire safety systems for. The customer was looking for a high-performance fire detection system that would not be affected by these environmental factors, and most importantly avoid false alarms which can halt production and cost the company thousands of Euros for every minute the site is not fully operational. The installation team also needed to pay particular attention to the installation of cables and piping. As a specialist in aged cheese production, it was imperative that the delicate work of the cheese wheels and the hot marking of the upper layer of the Parmesan rind was not affected during the installation project. Intelligent Photoelectric Smoke detector with SCI incorporates Hochiki's newest High Performance Chamber Technology. This detector removes the need to use Ionisation Smoke Sensors in many applications. This also allows the sensor threshold level to be increased, thereby improving the signal to noise ratio, and reducing the likelihood of false alarms. Throughout the site Intelligent Loop-Powered Wall Sounder Beacons and Visual Alarm Devices were installed to ensure a fully compliant and state of the art fire safety system.   **www.hochikieurope.com**

Morse Watchmans Showcases Key Control Solutions at ISC West 2022

Morse Watchmans exhibited at ISC West highlighting their latest solutions. The company's flagship system, the KeyWatcher Touch electronic key cabinet, was on display at ISC West 2022 alongside Morse Watchmans' vast inventory of products for the storage, control, and management of keys and assets. Morse Watchmans' solutions include KeyWatcher Fleet for fleet management applications, KeyBank Touch, and KeyBank Auto for a total automotive key storage solution. Additional product offerings include SmartKey Lockers for the management of small assets, tamper-proof KeyRings, and the PowerCheck Guard Tour System. These solutions, coupled with Morse Watchmans' industry-leading software, service, and support, ensure the safety and security of a variety of physical assets. Morse Watchmans, a security solutions provider since 1882, was acquired in December 2021 by TouchPoint, Inc., a privately held diversified global growth company. In its portfolio, TouchPoint provides access hardware, medical technology, and intelligent inventory management solutions. Morse Watchmans joins TouchPoint's intelligent inventory management platform, positioning themselves for exponential market growth to provide global key control and asset management solutions.   **www.morsewatchmans.com**

Salto acquires Cognitec Systems

Salto Systems has acquired Cognitec Systems, a developer of automatic face recognition technology.

Based in Dresden, Germany, Cognitec has offices in Australia, Spain and the U.S.. Cognitec's portfolio includes face image database search, recorded video investigation, real-time video screening and people analytics, border control, ICAO compliant photo capturing, and face image quality assessment. The company's flagship FaceVACS algorithm has also been continuously validated by NIST (National Institute for Standards & Technology) performance tests. Since its founding in 2002, Cognitec has partnered with government entities, law enforcement agencies, and commercial clients in more than 50 countries. For example, the German Border Police use Cognitec technology to facilitate automated passport checks and biometric photo capture within the European Entry-Exit System (EES). "Working with Cognitec gives Salto the opportunity to integrate emerging biometrics, face recognition, and artificial intelligence technologies into our group products and platforms to create new solutions and services that benefit all of our clients," Salto Systems Chief Technology Innovation Officer Marc Handels said in the statement. "Cognitec's technology is highly compatible and integrable across the Salto product portfolio of access control, smart lockers, and booking and ticketing solutions. Incorporating applications like frictionless check-in and hands-free access into our applications will improve the Salto customer experience whether it's used in business, residential, or leisure and fitness."   **www.saltosystems.com**

PureTech: Integration with OWL GroundAware Radar

PureTech Systems announced the successful integration of the OWL GroundAware GA1360 2D digital multibeam forming radar system with the PureActiv Rapid-Deploy Autonomous Perimeter Surveillance System (R-DAPSS). R-Dapss is equipped with PureTech's patented geospatial and AI boosted video analytics, PureActiv, which provides among the highest probability of detection while maintaining near-zero nuisance alarms for perimeter and wide-area protection. The easily relocatable trailer is equipped with radar, PTZ Cameras and PureActiv Auto-verification to eliminate nuisance alarms and perform auto-tracking, and deterrents such as loud hailers and strobe lights. In addition, the R-Dapss is solar and backup generator powered, needing little to no fuel, depending on installation location, thus providing an environmentally friendly protection system that does not require ground penetration and has minimal impact on local wildlife. The GA1360 system from Observation Without Limits (OWL) combines advanced digital beamforming radar technology, classification intelligence, reconfigurability, and easy integration with other security systems (such as video management and access control systems) to bring 360° of real-time, all-weather situational awareness for the physical security of perimeters and other sensitive areas of critical sites. As the foundation for event-based layered security, GA1360 enables automated detection, tracking, deterrence, and response to intrusions within a 1 km radius of critical sites -- that's up to 750 acres or 300 hectares covered by a single radar.   **www.puretechsystems.com**

GIT SECURITY AWARD 2023

May We Have Your Votes Please

Online Voting – www.security-award.com

GIT SECURITY AWARD categories
We have asked security and safety product vendors to submit their best products in the following categories:

- A – Machine & Plant Safety
- B – Occupational Safety and Health & Explosion Protection
- C – Video Security Systems & Video Management
- D – Access Control & Intruder Alarm
- E – Building Safety, Perimeter & Fire Protection
- F – Special Category: Sustainability

Voting
This year, we present the nominated products online only with the option to vote directly via the voting tool. To have a look at the nominated products, please go to our voting platform www.security-award.com. An easy way to do this is to scan the QR code in this article. To have fair voting, companies cannot vote for their own product. Moreover, you will have to vote with your company address. Private persons are not entitled to vote. Therefore, a business address is essential. Please select one product in each category. Vote now – Voting is possible from May 15 to August 15, 2022 on www.security-award.com

Reader Prize
Amongst all voters we have a prize draw for five Ledlenser P7R-Work torches. This extremely powerful and versatile working torch offers custom light functions and natural color rendering.

Reader Prize

Vote now – Voting is Possible from May 15 to August 15, 2022 on www.security-award.com

The Jury ▼

Category A

Lisa Holland (Wiley), Dr Markus Winzenick (ZVEI), Birgit Sellmaier (VDMA), Dr. Timo Gimbel (Wiley)

Category B & D

Steffen Ebert (Wiley), Bernd Sassmannshausen (Merck), Heiko Viehweger, Joerg Crauser (BHE), Lars Komrowski (TÜV), Heiko Baumgartner (Wiley)

Category C, E, and F
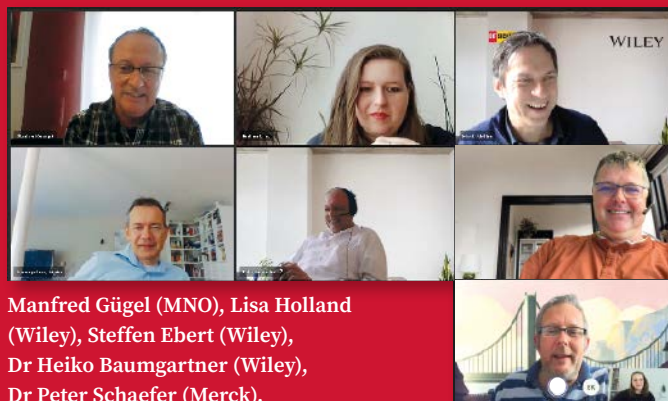
Manfred Gügel (MNO), Lisa Holland (Wiley), Steffen Ebert (Wiley), Dr Heiko Baumgartner (Wiley), Dr Peter Schaefer (Merck), Peter Krapp (ZVEI), Thomas Kunz (vi2vi)

Once again our GIT SECURITY AWARD jury has selected their favorite industry products. Now it is up to our readers and the users of GIT-SECURITY.com to select their favorite product and vote. This year we will present the nominated products online only with the advantage that you can vote directly on the presentation platform. New for this year is the special category Sustainability where our readers can vote for the best sustainability project in our industry.

Vote now

GIT SECURITY AWARD 2023 FINALISTS

WILEY

Simple Door Upgrade

Many domestic spaces repurposed for home offices are not equipped with the security or privacy that working from home requires, so the Code Handle from Assa Abloy is a locking handle with a built-in digital PIN keypad that is suitable for most lock cases and door types. A secure 4 to 6-digit PIN ensures that only authorized people can enter a home office. There is no need to use or keep track of a key. At the end of a day, homeworkers do not even need to remember to lock their office: the Code Handle locks itself when the door is closed and, for safety, allows simple, code-free exit from the inside. Home security for hybrid workers does not begin and end at the front door. A domestic workspace requires security of its own. Installation is simple: a homeworker can simply swap their existing door handle for a Code Handle: it is easy even for non-specialists, and also straightforward for any domestic locksmith.

www.assaabloy.com

Wide-Coverage Proactive Surveillance Devices

i-PRO EMEA has introduced its new multi-sensor camera range with deep learning intelligence at the edge. As the next step in the company's AI-ification strategy, these new cameras come pre-installed with four powerful AI analytic applications, but are also open for customization with other 3rd party analytics to meet customers' needs. The new multi-sensor cameras are available with three or four imaging sensors in 4K, 6MP and 4MP resolution, ensuring exceptionally detailed image capture for 180° or up to 360° vision adaptable to the installation environment. All these features come in the thinnest and most discreet design. The ability to autonomously detect and differentiate objects in wide areas allows security personnel to focus on real events of interest. The cameras also feature FIPS 140-2 level 3 encryption secured by a 3rd party certificate provider.

www.i-pro.com

EVENT

Ifsec Preview 2022

Live Installer Training and LPCB Attack Testing Zone come to Ifsec & Firex

Ifsec & Firex are back from 17–19 May 2022 at London's ExCeL. For the first time, installers, integrators and engineers will be able to attend focused, in-person training sessions to ensure they remain on top of the latest best practices in security and fire, and secure CPD points to keep up with the growing push for competency requirements. Another addition: After almost three years since visitors last saw it in action, the LPCB Attack Testing Zone will also return in 2022.

Ifsec International welcomes thousands of global security professionals to explore innovative products and solutions and collaborate with the entire security community from 17-19 May 2022 at London's ExCel.

Global Security Suppliers

Visitors will be able to meet face-to-face with leading security suppliers and leading security companies across access control, video surveillance, perimeter protection, cyber security and more. There's been a wealth of innovation and new product development during the pandemic, with many of these on display for the first time. Ifsec International will be an exclusive opportunity to witness these new developments brought to the market first-hand.

Installer Training

In line with the push for improved competency standards and updated CPD requirements that come with the ECS changes, and

to support those looking to develop their expertise, Ifsec and Firex International will be hosting a programme of CPD-accredited in-person training sessions dedicated to the installer and integrator fire and security community. Installers will be able to attend training sessions from a mix of training providers and expert vendors on topics such as video surveillance, access control, fire alarm systems and plenty more.

The initiative will provide delegates with an unmatched opportunity to get the most out of their visit to the shows, where it will be possible to source new solutions, network with peers and suppliers and develop existing knowledge, all in one place.

A small fee will be charged per session to encourage attendance, though heavily subsidised from the original costs as part of Ifsec and Firex's ongoing support in helping to address the skills gap. To ensure sessions remain focused, there are a limited number of spaces available on each. Welcome refreshments, as well as lunch vouchers for all delegates will also be included in the price.

Each course will start in the morning or around midday and last anywhere between 4-6 hours, to ensure delegates receive an appropriate level of training, while also allowing for plenty of time to speak to suppliers and catch up with likeminded professionals on the show floor. Courses will be hosted away from the show floor in the gallery suites at London's ExCeL

What will Ifsec & Firex Training offer?

The prospectus of available courses on offer at the event will cover a variety of key topics that were selected by installers as areas of interest in a survey undertaken by Ifsec & Firex in 2021.

Courses will be delivered in two distinct manners, both of which were highlighted as important methods of training for fire and security installers in the same survey:

1) Courses delivered by independent security and fire training organisations

2) Courses delivered by manufacturers – these will be vetted by an independent consultant to ensure the quality of training is of a high standard and isn't a 'sales pitch'. The sessions will also look at technological innovations which meet new industry codes and standards that installers should be aware of.

Topics being covered include:
- ECS Systems Operative – Fire, Emergency and Security Systems (FESS) by Skills for Security
- Introduction to Fire Detection & Alarms by Fire Industry Association (FIA)
- Cyber Security by Hikvision
- Digital Service Masterclass by Texecom
- Optical Fibre Overview and Fusion Splicing Workshop by Tavcom Training
- Introduction to fire doors and fire protection in buildings by Warringtonfire

Full Agenda:

Converged Security Centre

Exclusively demonstrating the value of unifying physical and cyber security for 21st-century threats, the Converged Security Centre (CSC) returns to Ifsec International in 2022. Visitors can experience the original and best demonstration of how physical security and information technology fuse to provide a holistic solution.

Engineers of Tomorrow

Engineers of Tomorrow also returns to the show in 2022. Taking place each year, winners of regional heats compete in a live installation challenge at the show. The process involves two separate competitions – one for electronic security systems, and the other for fire systems.
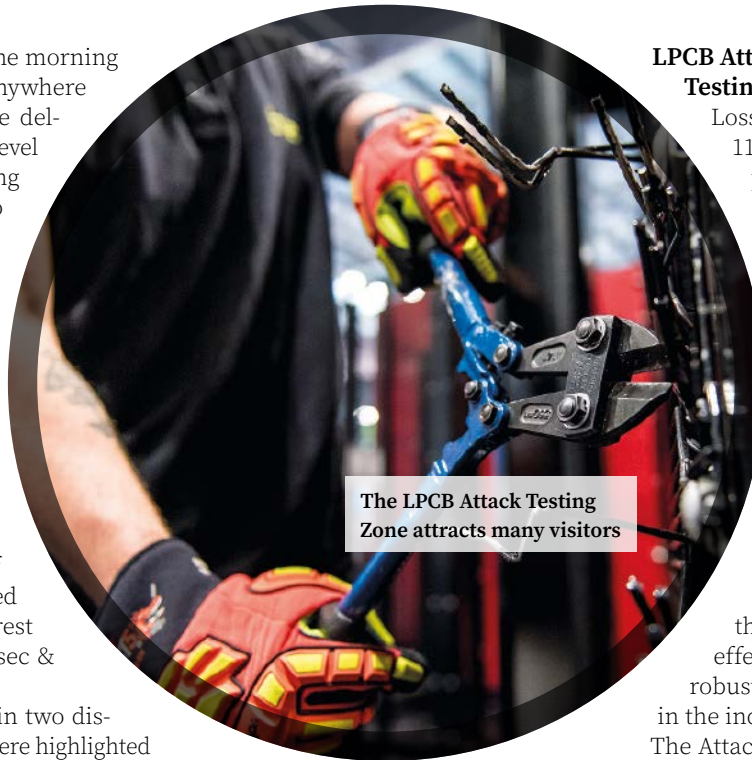
The LPCB Attack Testing Zone attracts many visitors

LPCB Attack Testing Zone

Loss Prevention Standard, or 'LPS', 1175 is one of the many standards published by BRE (Building Research Establishment) Global through the LPCB (Loss Prevention Certification Board) is a certification mark held by companies in over 40 countries.

Each year, the LPCB Attack Testing Zone attracts thousands of visitors, and 2022 is set to be no different. Throughout the course of the event, attendees can observe live test sessions, carried out by professionals from the LPCB team to demonstrate the effectiveness of some of the most robust physical security equipment in the industry.

The Attack Testing Zone will showcase a wide range of products used to protect high security facilities and sites, such as critical infrastructure, and mitigate against the potential risks of terror incidents, including:
- Fencing ■ Gates ■ Turnstiles
- Doorsets ■ High security padlocks

The area is hosted by BRE, whose LPCB certification mark for fire and security products and services is highly respected around the globe. LPCB has been working with the industry, specifiers and government under various guises, including the Fire Offices' Committee and Loss Prevention Certification Board, since 1868. Its LPS1175 standard for intruder resistance has been widely adopted across the UK within specifications for protection of commercial property, infrastructure, publicly accessible locations and high net worth residential.

Tech Talks Live

Ifsec Tech Talks Live is an initiative designed to bring product and solution demonstrations directly to the security audience. Join us on the SSAIB, our Official Installer Partner, stand to learn, watch live demonstrations and ask questions about the security products you use every day from the technical experts behind them on a live Q&A.

Co-located Shows

The free ticket to Ifsec International gives visitors unlimited access to a series of five co-located events: Ifsec & Firex International, Intelligent Building Expo, Safety&Health Expo and Facilities Show. Visitors will have an opportunity to explore a vast range of innovative products and benefit from cross-sector learning and networking.

Hot Topics
- Installer Training
- Global Security Suppliers
- Converged Security Centre
- Engineers of Tomorrow
- LPCB Attack Testing Zone
- Tech Talks Live

CONTACT
Ifsec International
London, UK
+44 (0)7855 087 773
adam.richmond@informa.com
www.ifsecglobal.com

EVENT

Security Essen 2022

Small and Medium-Sized Companies Benefit from the "Innovative SME Trade Fair Programme" – Security Industry Reports Increase in Turnover in Many Sectors

The security industry is booming. Whether technical high-end solutions or highly professional services - until recently, all areas reported sales growth. Security Essen is an established platform for international exchange, with visitors from Europe and many other regions of the world.

These are the best preconditions for Security Essen 2022", Oliver P. Kuhrt, CEO of Messe Essen is pleased to say. "We offer the industry a top-class platform to present new solutions compactly and efficiently to decision-makers, buyers and other experts. Security Essen covers the complete range of the security industry, and does so within short distances." The focus of the range of products and services is on innovations in the field of electronic and mechanical security technology as well as cyber security, services and fire protection. The fair will be rounded off by an extensive accompanying programme with informative lectures.

Among the exhibitors registered are Hikvision, Deutsche Telekom, Kale Kilit, Carl Wittkopp, aswell as Salto Systems - and also the company ABI-Sicherheitssysteme. ABI Sales Manager Joachim Schairer: "Security Essen is the most important platform for us as a manufacturer of electronic security technology. The entire security industry meets there, which gives us the optimal opportunity to present our innovations. The fair also offers us a unique option to make new, relevant contacts within the industry."

Funkwerk Video Systeme will also be among the exhibitors. "We are very much looking forward to finally being able to exhibit at Security in Essen. Even though

digital conference solutions certainly have their advantages, the direct and personal contact to our customers and interested parties is simply irreplaceable in the context of an international trade fair. This time, the focus will be on our individual video security solutions, but also on new developments from the Smart Building and Mobility sectors," says Christian Kaup, Head of Product Management & Marketing.

Extensive Fair with Short Distances
Its bandwidth is what makes Security Essen so attractive for the security industry. With the areas of video; access, mechatronics, mechanics, systems & perimeter; fire,

burglary & systems as well as services & digital networking security, all segments of the industry are to be found under one roof. "This successful concept stands for short distances, direct discussions and intensive professional contacts," says fair project manager Julia Jacob. Security Essen offers companies numerous opportunities to present themselves to an international audience. Exhibitors benefit from individual stand options, theme-specific joint areas or time- and cost-saving complete packages.

The accompanying programme offers further added value for visitors and exhibitors. Together with the technical training institute Haus der Technik, Messe Essen is organising the two-day fire protection forum. The Digital Networking Security Congress is also scheduled for two days of the fair. Here, the speakers will focus on security in networks, IT security, interfaces and cyber threats.

Particularly in Demand: Access Control Systems and Video Security Technology

Despite pandemic conditions, the security industry market developed well in the recent years. The Bundesverband der Sicherheitswirtschaft (BDSW, German Federal Association of the Security Industry) most recently reported a four percent increase in turnover to more than 9 billion euros for its sector. The German market for electronic security technology most recently grew by 1.6 percent to 4.695 billion euros in 2020 (latest figures for 2021 will be published by the BDSW, BHE and ZVEI associations in the middle of the year 2022).

Access control systems (plus 4.3 percent) and video security technology (plus 7.1 percent) grew particularly strongly here. ABI-Sicherheitssysteme sees a trend above all in products that are becoming smarter. "This development is caused, among other things, by the massive advance of cloud solutions. In addition, security technology will communicate more and more with building automation and partly merge," is the assessment of sales manager Joachim Schairer.

Support for SMEs

Security Essen is the showcase for innovative products and services. Many trend-setting innovations also come from the SME sector. In order to make it easier for small and medium-sized companies to participate in the trade fair the Federal Ministry for Economic Affairs (BMWi) has included the security trade fair in its new funding. As part of the "Trade Fair Program for Innovative SMEs," exhibitors will receive a subsidy for stand rental and construction. "The aim of this benefit is to support the export marketing of German companies. We are pleased that exhibitors at Security Essen will be given this opportunity. Companies can apply for the subsidy," explains Julia Jacob, Project Manager of Security Essen.

The Federal German Ministry for Economics Affairs and Energy will contribute to the costs of a company's individual stand at Security Essen. Expenses for stand rental and stand construction are subsidized in the amount of a maximum of 40 percent up to a total sum of 12,500 euros. Applications are open to companies which have

their registered office in Germany and have newly developed or significantly improved products, processes and services.

Small companies can receive support if they have a maximum of 50 employees, annual sales or an annual balance sheet total of no more than ten million euros and have been in existence for more than ten years. Medium-sized companies are eligible for support if they employ between 50 and 249 people and have an annual balance sheet total of no more than 43 million euros or annual sales of no more than 50 million euros.

Companies can Already Submit Their Applications

The subsidy program is managed by the German Federal Office for Economic Affairs and Export Control (bafa). Companies can now submit their application for the subsidy for their stand at Security Essen online via the bafa homepage www.bafa.de . For start-ups younger than ten years, there is separate support for participation in a joint stand via the "Young Innovative Companies Trade Fair Program". Information and applications can also be found on the bafa homepage.
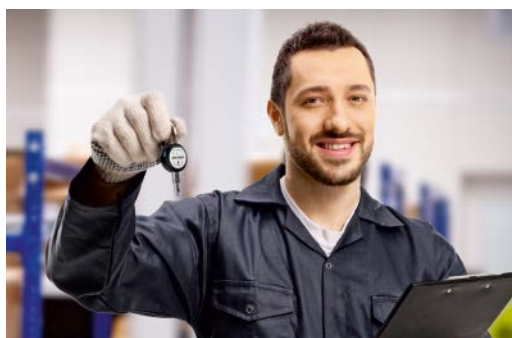
CONTACT

Security Essen
Messe Essen GmbH
Phone: +49 201 72 44-522
julia.jacob@messe-essen.de
www.security-essen.de
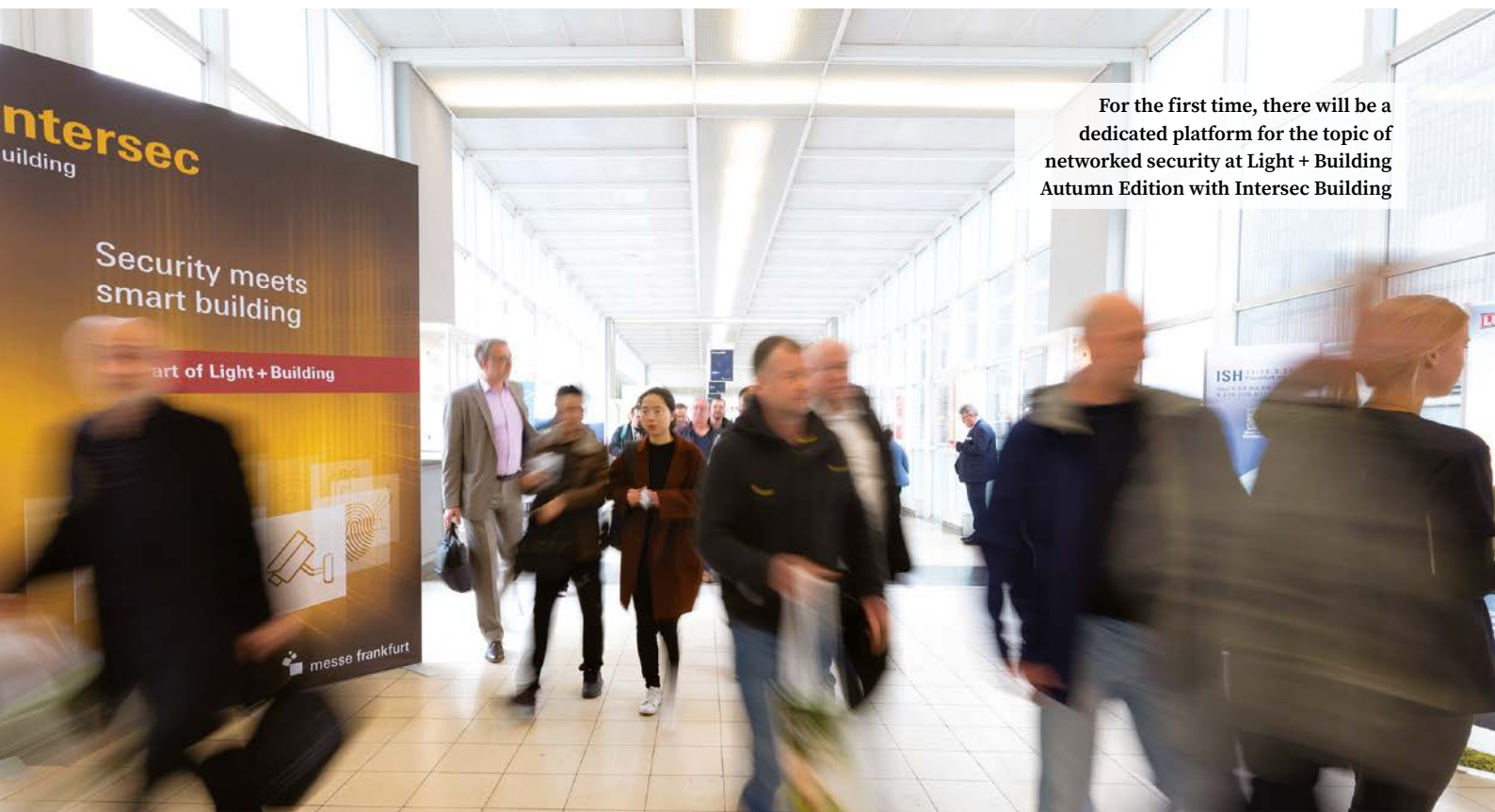
For the first time, there will be a dedicated platform for the topic of networked security at Light + Building Autumn Edition with Intersec Building

EVENT

Connectivity and Security

Security Systems In the Center of Light + Building Autumn Edition

In times of crisis, the need for reliability and security grows. This applies to political and economic conditions, but also in particular to places of retreat such as homes and buildings. As a result, the demand for security technology equipment and systems is increasing. Due to its topicality, networked security is one of the top themes of the Light + Building Autumn Edition from October 2 to 6, 2022 in Frankfurt.

In the smart home and smart building, networked security technology is an integral component. Exhibitors of security technology products and systems will present the latest innovations and trends in the various exhibition halls and in the new Intersec Building focal point in Hall 8. Companies such as Abus, Assa Abloy, Axis Communications, Burg Wächter, Daitem, DOM, GEZE, Gretsch-Unitas/BKS, Hikvision, Lupus and Salto Systems and Siemens will present their solutions at the Light + Building Autumn Edition.

Exhibitors who belong to the Intersec Building focal point are specially identified with a label on their stand, but also in the Light + Building Contactor. This makes it easy for participants with a special interest in security to find the right offer and optimally plan their visit to the trade fair.

Intersec Building

"We are very pleased that many leading manufacturers from the field of networked security technology have commited for the special edition in the fall. This means that for the first time we can present the range of products and services on this topic in bundled form. Visitors can thus expect not only an attractive range of products and services in the field of access control and video management systems, but also a cross-trade and international portfolio overall. The new area of networked security technology offers solutions for highly topical social issues," explains Johannes Möller, Brand Manager Light + Building.

With the new product area, Light + Building builds on Messe Frankfurt's expertise in the field of Safety, Security & Fire. "We are benefiting here above all from

the experience of the leading trade fair in Dubai and are further expanding the network internationally with twelve globally positioned events," Möller adds. The Safety, Security & Fire events open up access to dynamic markets on the Arabian Peninsula, in Asia, Europe and South America.

Intersec Forum

Part of the Light + Building Autumn Edition is the comprehensive program of the Intersec Forum in Hall 8. From October 3 to 6, 2022, the specialist conference for networked safety and security technology is the cross-industry expert get-together and networking event for those who plan, operate and develop building technology systems. Their challenges lie in the integration of various security systems and technologies. Accordingly, the conference

content covers all technical, legal, economic, regulatory and scientific aspects of the interconnecting building services and security trades. Emphasis will be placed on the industry topics: Future of security technology in the networked building; Semantic interoperability of trades, software and protocols; Video technology and access control, use of biometric data; Fire protection in the context of building renovation; AI and predictive security. Intersec Forum's partner for conference planning is ZVEI-Services GmbH, who are part of ZVEI, the industry association for the electrical and electronics industry in Germany.

Digital Version

For the first time, the physical trade fair in Frankfurt will be supplemented by the Light + Building Digital Extension. From October 2 to 14, 2022, the digital platform will offer new opportunities for networking, knowledge exchange and encounters. The additional offering helps to expand one's own circle of contacts in a targeted manner via AI-supported match-making. The platform also offers greater independence of time and place: Exhibitors can offer product presentations via video streaming and get in touch with customers digitally. All participants will have the opportunity to find out about the Light + Building Autumn Edition program items on-demand even after the live event.

Images © Messe Frankfurt Exhibition GmbH / Sandra Gätke

The meeting place for networked security technology in close proximity to the exhibitors of the Intersec Building section in Hall 8

The Light + Building Autumn Edition event will take place from October 2 to 6, 2022. In parallel, the Intersec Forum will open from October 3 to 6, 2022. Conference participation is included in the ticket price of Light + Building Autumn Edition. The Light + Building Digital Extension is accessible from October 2 to 14, 2022.
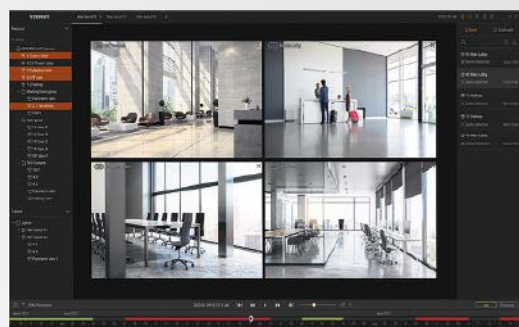
CONTACT

Messe Frankfurt Exhibition
www.messefrankfurt.com
www.light-building.com
www.Intersec-Building.com
www.intersec-forum.com

Managing Multiple Video Sources

Hanwha Techwin has launched Wisenet Viewer 1.0, a new NVR/DVR viewer that makes it simple to view and manage different video sources through one interface. It is designed to make video management easy and works with all Wisenet recorders. It removes the need for a dedicated server to manage all video sources, leading to cost reductions and helping to preserve existing investments without new licenses or replacing all recorders. Operators can view multiple applications on multiple monitors, including web pages and images, monitor live video, search and play recorded video, and set event rules such as alarms, video and audio analytics, face detection, tampering, and object detection. The software supports Windows and macOS operating systems. Wisenet Viewer 1.0 is easy to set up and saves time and maintenance overheads. It is free when organizations buy a Wisenet recorder.

https://bit.ly/3q9BTln

Secure Access Control Flexibility

Integrated security manufacturer TDSi is introducing its new Gardis App at The Security Event 2022 (5th–7th April at the NEC Birmingham, UK) where visitors can join TDSi on Stand 3/C40 for a live demonstration. Designed as a complementary tool, it provides a number of features including People Management (add, edit, or delete users from access authorization), Live Events information, Door Control, and Visual Verification through compatible Android and Apple iOS devices. The App is the latest addition to the company's Gardis ecosystem of highly secure but flexible access control hardware and software solutions. Designed for easy usability and backed up by highly secure encryption by utilizing the personal authentication of the mobile device itself, the app has been designed with the primary needs of security end users firmly in mind.

www.tdsi.co.uk

BUILDING SOLUTIONS

Get Connected

Designing the Buildings of the Future with Bosch Building Technologies

GIT SECURITY talks to Dr. Marcus Nadenau, Head of Bosch Energy and Building Solutions Europe, about megatrends in building technology, the transformation from system integrator to digital service provider, and how security, safety, comfort, sustainability and profitability can be united.

Dr. Marcus Nadenau, Head of Bosch Energy and Building Solutions Europe: Building owners and operators should have it easier, users should profit from the additional comfort

Dr. Nadenau, you are a highly qualified electrical engineer, and you have been in charge of the European system integrator business Bosch Energy and Building Solutions and its 5,000 associates since 2019. You had already held several management positions at Bosch since 2005. Before that, you worked in the United States and Switzerland for the Boston Consulting Group and Hewlett-Packard. How have these experiences shaped you?

Dr. Marcus Nadenau: Due to the experiences from many different sectors and the positions I have held abroad, I bring to the table a great interest in new technologies, an entrepreneurial mindset, and a passion for creating an open culture both within the company itself and in interactions with our customers and partners. In my current job, my focus is on growth and innovation to the benefit of our customers, partners, and our company.

Strong growth: Bosch took over the Protec Fire and Security Group with 1,100 employees at the end of 2021

Can you give us a little insight into the European system integrator business?

Dr. Marcus Nadenau: We see ourselves as the ideal partner for boosting security, safety, comfort, and efficiency in commercial buildings. We are a full-service provider throughout Europe, with a focus on Germany and the Netherlands. Our associates are highly committed to providing and implementing tailor-made, industry-specific solutions for our customers.

Which solutions and services do you offer your customers?

Dr. Marcus Nadenau: One of our key areas is security and safety of buildings. Fire protection, public address and voice alarm systems, intrusion protection, video surveillance, time recording, and access control – we offer practically the entire range of security and safety applications. In addition to our technical expertise in consulting, planning, and installation, our nationwide service team ensures smooth operations by taking care of maintenance and repairs. We have 50 locations in Germany alone, plus many, many people in the field for our customers every day – even during the pandemic, when it has not always been easy.

How is your business doing?

Dr. Marcus Nadenau: We are growing strongly, with more and more solutions in the field of building automation and energy efficiency, plus some strategic acquisitions. In 2019, we acquired the GFR – Gesellschaft für Regelungstechnik und Energieeinspa-

rung, along with its workforce of approximately 300 employees. The company has over 40 years of experience in setting up complex automation solutions and is the perfect addition to our portfolio. From April 1, 2022, the company is operating fully integrated into our company under the name Bosch Building Automation GmbH. At the end of 2021, we completed the acquisition of the British Protec Fire and Security Group, with another 1,100 employees. Just recently we also acquired the Hörburger AG, a proven building automation specialist with around 200 employees.

What is the strategic significance of these acquisitions?

Dr. Marcus Nadenau: I am delighted that the Bosch family is getting even bigger. Protec and Hörburger fit brilliantly into our growth strategy. We have built up a very successful business in Germany and the Netherlands – and now we can really enter the UK market, which has huge potential in our view. Hörburger AG offers a comprehensive product and solutions portfolio focusing on building automation and energy management. By acquiring companies with highly qualified staff, we are strengthening our current portfolio in the areas of building security and safety, energy services, and building automation.

And how do you want to develop Bosch Energy and Building Solutions in the long term?

Dr. Marcus Nadenau: We want to be first choice for our customers in the future, too, when it comes to using technologies and

services to make buildings more secure, safer, more comfortable, and more efficient. This is why we are constantly working to keep abreast of the megatrends that bring changes with them – climate change, increasing urbanization and the digital transformation, for example.

What does that mean for your sector?

Dr. Marcus Nadenau: These megatrends have a big influence on the needs of our customer groups. Climate change and energy efficiency have distinct implications for the real estate business other than for industrial companies, for example. A lot is changing on the technological front, too. We were quick to recognize that our sector was changing from one that was previously heavily based on hardware to a connected, sensor-based world. We also saw that intelligently accessing data would open up diverse new opportunities for operating buildings and infrastructures in ways that are even safer, more secure, more cost-effective, and also better for the environment. We are aligning our operations accordingly, placing a strong focus on a range of intelligent building solutions and offering increasingly more new business models in the future, including digital services that use sensor data in sophisticated ways.

How exactly should we imagine these services, and which ones will you offer?

Dr. Marcus Nadenau: I like to compare them to the digital services offered by streaming providers. It used to be that we had to buy or rent "hardware" such as a DVD if we

It is important for Dr. Marcus Nadenau to develop and test new digital services in agile processes

wanted to have a movie night with the family. These days, that seems so old-fashioned. Instead, we now search for something suitable on a digital platform and watch the movie there. We enjoy the event itself, with hardly any effort involved. This principle is easily transferred. Our range of digital services is strongly focused on optimizing operations. Even when it comes to managing and securing a building, the effort involved should be kept to a minimum. A security officer who is working for our customers and is responsible for fire protection can easily access those systems and see digitally how they are running and whether everything is okay in the building. Evaluations then provide recommendations on which systems need some investment, where fire detectors need to be replaced after their expiration, for example. All this is a digital service that also highlights the budget that should be set aside for it in the coming year.

Are there any other examples of this kind of digital services?

Dr. Marcus Nadenau: Another service we are going to offer relates to monitoring and boosting the efficiency of heating, ventilation, and air conditioning systems, in short HVAC. These are subject to very complex dependencies and keeping on top of these to ensure they always operate to their best is often not easy, even for highly qualified specialist staff. Recording and linking various bits of data helps with this, and combined with AI algorithms, it is possible to optimize the operation of these systems.

Finally, it is also about diversifying digital services. I would again like to draw a comparison with the private sector, where it is possible to interact freely and easily with the established digital voice-activated assistants by simply saying something like: "XY, turn on the lights." These habits are also driving applications in commercial buildings. For example, when I drive onto a company's premises, I would like to know more or less immediately where I will find a free parking spot, or how I can get to the conference room where my meeting is being held with as little stress as possible once I enter the building.

Does that mean you have already had customer inquiries about these kinds of services?

Dr. Marcus Nadenau: We are receiving inquiries about those kinds of solutions more and more frequently. The demand is there. We are currently in the middle of implementing a major project with a Dutch customer, where precisely these kinds of services will be implemented as part of the digitalization of an existing campus – and we are the partner for this digital transformation.

So you think customers or operators want the solutions they have got used to having at home to be available in their workplace, too?

Dr. Marcus Nadenau: That's right – and that will trigger more demand. Customers are becoming increasingly familiar with such features and the resulting convenience from private applications, and they are asking themselves why things should not be just as convenient in the commercial context.

What role do customers and their needs play in this precisely?

Dr. Marcus Nadenau: It goes without saying that their role is a pivotal one, and this is also something that is very important to me. Let me explain that by relating it to another experience we are all familiar with. Whenever someone unpacks a new piece of technical equipment, they do not sit down and read a long set of instructions before switching it on. It is the same thing when you open the media library on your streaming service – you want it to be easy for you to find the movie you are looking for. Digital services have to be just as simple and intuitive for our customers. Of course, there can be a very big difference between a service in an industrial context and the needs of an airport or a retail company. That is why we organize user experience workshops with our customers, run lots of interviews, conduct tests and gather feedback. We also have to understand the needs of the various parties involved and provide the best service for all of them. The operator could be a facility manager or the security officer who wants to keep the installations in the building optimized. Or in an office, it could be staff members like you and me. It could also be an employee in a hospital. Again, we have to get to grips with the context in which systems are to be used. In an office building, I am looking for the conference room, whereas in a hospital, I might need to find the nearest mobile ultrasound device in a hurry. Or I could be a real estate manager who needs a service that will boost the energy efficiency of my portfolio. Even these few examples make it clear that not all customers are the same: We specifically address the individual requirements.

Smoke alarms, heating, ventilation, air conditioning, blinds – how do you think the systems in a building will interact with each other in the future – and what timescale are we talking?

Dr. Marcus Nadenau: We are increasingly seeing systems being combined with each other already. The installed security and safety technologies and systems, building automation, and energy supplies already provide vital data on a daily basis. You just have to use this data intelligently. It is this potential we aim to maximize for our customers. Take for example the parameters and data from an existing access control system and add sensor technology that can determine when which room in the building is needed and what temperature it should be at. We then generate valuable insights for owners and operators about the utilization rate of various areas or rooms, enabling us to answer questions such as: Do I have too little space? Do I have enough? Do I need to rent more space? Are

rooms being permanently heated or cooled, even though they are only occupied for short periods? This all comes under what you might call "modern management". That was not previously the case. Instead, one focused on a solution in the individual systems. The data that was gathered was not linked, and there was certainly no overarching evaluation. – Not very efficient and not saving valuable resources – it is possible to do much better.

Are you thinking of having sensors installed in quite different systems in a building?

Dr. Marcus Nadenau: Oh, definitely! For example, it is quite possible that more sensors will be integrated into the existing, required fire alarm infrastructure. These can then be used to take measurements for assessing the air quality, for instance. In the future, building technology, installations, software, and sensors will share data from the whole building with each other in real time. This collected data can then be used to derive scenarios and forecasts that make it easier to operate the building efficiently.

How is it possible to balance technological progress and ecology, especially against the background that more comfort and convenience potentially change the ecological footprint?

Dr. Marcus Nadenau: Especially when it comes to the megatrend of climate protection, these kinds of versatile sensor environments can be used to make things more efficient and cost-effective without having to give up any comfort and convenience. It is still relatively easy to achieve sustainability effects in new buildings. Existing buildings are a much bigger task. Particularly when upgrades are being made, this offers an opportunity to install cutting-edge technologies in order to boost the efficiency of systems through intelligent controls, and thus improve the ecological footprint.

According to your analysis, how is the overall market for building technology, security and safety developing, and what role is Bosch playing in that – and what is your own personal outlook for the future?

Dr. Marcus Nadenau: The environment in which we operate is exciting and dynamic. As a result, our – my – work is really enjoyable. Bosch has an outstanding and very broad technological basis, which means we are perfectly placed to meet the challenges I already mentioned and support and equip our customers and projects

brilliantly. Fundamentally, the importance of AI and connectivity is growing, as are partnerships with creative tech companies – be they major players like Microsoft or smaller startups. New services such as the ones we offer will not necessarily follow conventional business models. Our goal is to optimize building management. Digital twins and AI help put the data that has been collected into the correct context. Here is a simple example: It is only possible to assess whether 24 degrees Celsius is right for a room when you know whether it is a refrigerated room or an office workplace. Therefore, it is essential to model semantic correlations. That is precisely what we have been working on with our partners over the last few years. We feed our findings back to the community as open source, meaning they are available to all market players. Overall, I think this market will become more open. There will be less dependence on proprietary systems to meet the challenges of the future. Bosch is in a good position. We are an open company – at systems level, to new technologies, with our customers and in partnerships with interesting market players from the fields of technical facility management and real estate, for example. I am really looking forward to helping shape this future with my team.

Growth needs qualified new staff coming through. What benefits do you offer skilled associates?

Dr. Marcus Nadenau: One key point is purpose. Building solutions for a better life – that is what we stand for. Plenty of people want to be part of that and put everything into meeting some of the major challenges of the present and the future using cutting-edge technologies, solutions, and services. Specialists with this mindset are in exactly the right place here at Bosch. Anyone who joins us will find a highly motivated workforce. We live a culture of open dialog with a keen focus on end customers. What is more, our portfolio is very diverse. Whether in the office, in development or in service, as an electrician, installer or software architect, everyone has the opportunity with us to use state-of-the-art technologies and realize their full potential.

Dr. Nadenau, thank you for talking to us.

CONTACT

Bosch Building Technologies
Grasbrunn, Germany
+49 89 62900
info.service@de.bosch.com
www.boschbuildingtechnologies.com

© Bilder: Bosch Building Technologies

INTERVIEW

Distributor Transformation

Videor is Reinventing Itself – and Introduces New Products in 2022

Videor has re-started with a new company strategy, expanding its comprehensive portfolio of video security products and professional services and developing its own brand Eneo.
GIT SECURITY spoke with Dominik Mizdrak, Managing Director of Videor.

GIT SECURITY: Mr. Mizdrak, you operate as a distributor for almost all the companies that are involved in the video security market. Could you give us your impression of the current situation and mood of the market?

Dominik Mizdrak: The industry has developed very well: there are impressive growth rates in video security technology but also in new fields such as digital access control and audio equipment. Order intake is still increasing, but we also see a slowdown in growth due to the continued delivery problems. We are currently experiencing a time-consuming process of co-ordination with our customers and suppliers to manage constantly changing delivery dates. The availability of goods ensures commercial growth at the moment and also influences our ability to secure and grow our market share.

The expectations for German industry – at least according to the government's estimate in fall 2021 – are for a lower growth than previously calculated. Delivery problems, a shortage of raw materials and Corona all have an effect, as you already said. How do you expect things to develop in the mid-term?

Dominik Mizdrak: We do not expect any relief in worldwide delivery problems before the second half of 2022 – the situation is too tense and the manufacturers are working at full capacity. But we also see that manufacturers are working hard to optimise their portfolios and to modernise their production facilities in order to maintain their ability to deliver. We are not so much expecting a significant reduction of market growth, but rather a temporary slowdown in growth that can be compensated for in the second half of the year by the catch-up effect. At the moment, the installers' high workload is one limiting factor. Most of them have full order books.

You extended your product range in 2021– most recently, for example, you took over sales in Germany for the English company AMG Systems, and you have been a distributor for Avigilon since August with their AI-capable video security solutions. How important are these additions for Videor?

Dominik Mizdrak,
Managing Director of Videor

Dominik Mizdrak: We always try to extend our brand portfolio into areas with growth potential, and to enter market segments that were not completely accessible to us so far. We are very proud to be able to work together with Avigilon, which is part of the Motorola Solutions group. The excellent end-to-end approach and the AI-capable video analysis form the basis for the unusual and future-oriented product lineup of Avigilon, which is very interesting for the DE/AT/CH markets. With us, they have access to a broad customer base and we can also make a significant contribution to ensuring that the solutions are locally optimised to the full with our supplementary services. AMG Systems stands for first-class transmission technology. This partnership is very important for us because it allows us to add highly innovative products to our network and media technology portfolio, that are both well suited to the needs of our industry and particularly outstanding in tough industrial applications.

You were working on your strategy last year. Could you give us a summary?

Dominik Mizdrak: We decided upon our new strategy during the current business year and are now implementing this concept. Although we are reinventing ourselves, we want to remain true to our roots. That means that we want to provide our customers with an even better experience in distribution when it comes to customer interaction, provision of information or project consulting and support. Thus we will increase added value for our customers and improve customer experience.

So it's not just about the corporate image of the company but also about the change in the service spectrum of Videor?

Dominik Mizdrak: In addition to classic security technology, innovative solutions that are specifically tailored to our customers` requirements now also play a very important role in our corporate strategy. New technology leads the way here and we will follow this course with conviction. This is of course not happening in an empty space but takes place in the midst of an enormous social transformation that

fundamentally changes the world of work and the nature of work itself. If we want to focus even stronger on our customers and be innovative, it is essential to change our working methods. In the process, it is critical to give employees new degrees of freedom, to expand their scope for participation and to enable a greater degree of personal responsibility. This is based on trust and a sense of cooperation. The pandemic has shown us that we have a very

Videor headquarter
in Rödermark, Germany

solid foundation for this. We therefore are firmly convinced that, together with our staff, we can successfully tackle the change and lead Videor into a prosperous future.

Let's get back to your brand portfolio for a moment – your own brand Eneo holds a prominent position here. For example, you recently introduced a new hybrid recorder to the market that allows the user to modernise their analogue video security systems. What additions can we expect in 2022?

Dominik Mizdrak: The hybrid recorders in the MHR series really are an important addition to the Eneo product range. Whenever it comes to classic video surveillance, the modernisation of existing technology is and will remain an issue. This is reflected in the enquiries from our customers about hybrid components. And this is the reason why we keep this part of the portfolio up

to date. We expect a continued demand for products that bridge the gap between coax and IP-based technology for a long time yet. In the IP segment, we introduced the new AN series at the beginning of the year, expanding the Eneo core portfolio for standard applications. Some more models will be introduced in the coming months, among them some very powerful items. And our developers have also brought some exciting new models for the Eneo OEM segment up to market readiness that we will soon present to our customers. As you rightly said, Eneo is and will be very important for Videor and will continue to evolve, just as the company will.

One interesting introduction is the service flat-rate for installers, available since Summer 2021: Eneo Service Plus. How has this been received by the installers so far?

Dominik Mizdrak: Very well within the group of customers that we could gain for Eneo Service Plus to date. Yet we have underestimated how much effort it takes to adaquately and effectively communicate this service offer. This may be due to that fact that hardware is still at the center of any solution in our industry: a camera; a monitor; an IP access control unit; these are all 'physical' objects and you literally "get what you see". A service flat-rate, however, is first of all somewhat abstract, and therefore requires much more explanation up front. This is aggravated by the fact that we are dealing with drastically reduced attention spans on the part of our addressees. If, furthermore, the potential customer doesn't feel any acute need in one of the areas covered by the Eneo service pack, then the advantages will go unnoticed, whilst the contractual minimum term catches the eye all the more. It is a pretty tough job to pierce this filtered perception. Nevertheless, the customer questionnaires of our sales team have confirmed the original market analysis: yes, there is a need for services and it is increasing. It is now up to us to modify the Eneo Service Pack better to meet the need and to make the product communication more intuitive and more attractive to our target group.

Mr. Mizdrak, many manufacturers stress the environmental friendliness of

their components and solutions. Taking steps against climate change is one of the overarching issues in all branches of industry. What does video security technology contribute here and which initiatives are important from your point of view?

Dominik Mizdrak: This is a subject where there is still a lot to do. The industry must change its way of thinking and change itself. What is a throw-away product today will have to last a lot longer in future. Circular Economy is the new catchphrase and is a sustainable approach that manufacturers of video security systems should focus on. In concrete terms, this means that products can be used longer, repaired, recycled or made future-proof with the help of software updates. The efforts to reduce energy consumption are also very interesting. 4G or 5G surveillance cameras with their own integrated solar panel make CO_2-neutral operation of peripheral apparatus possible. And finally there is also a lot of potential for sustainability that could be realised rather easily in the logistics chain. We are already able to reduce the amount of packaging material or change over to packaging material made of renew-

able raw materials. At Videor, we are well aware of the importance of this issue. We have already implemented a number of measures for more sustainability and further steps are being discussed in our CSR working group. The conversion of our vehicle fleet to e-mobility is currently well underway. At the moment, vehicles can be recharged with renewable electricity at two points at our Rödermark site and we will be making six publicly accessible charging points available soon.

What is going to be important for Videor during 2022?

Dominik Mizdrak: As I mentioned at the beginning, the tense delivery situation will keep us busy for a while yet. We have to get through this period together with our customers and partners so that we can go full speed ahead in the second half of the year. In addition, our customers and partners can look forward to some exciting announcements very soon; whether in optimised customer care, the information level of our web shop, or in the expansion of our own brand and value-added service portfolio. A highlight which I am particularly looking forward to will surely

be the first integrated solutions that we will bring to market this year. Our location in Rödermark will also change because the new approaches and ways of working will require a different working environment. We want to provide our team with optimum conditions for creative working, from the ability to easily network across multiple locations, through quiet areas for concentrated working to rooms for personal conversations. We are currently working together with our staff on the redesign of our premises to make all that possible this year. With the new interior design, the continuity and change of Videor can be experienced with all senses. In this respect, it will not only meet the purely practical requirements that result from new, flexible forms of work, but will also fulfill an important function in conveying our strong corporate culture to future generations.

CONTACT

Videor E. Hartig GmbH
Rödermark, Germany
Tel.: +49 6074 8880
info@videor.com
www.videor.com
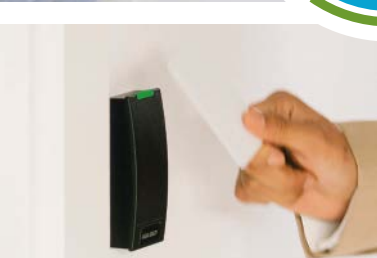
GREEN PAGES

A Letter against PPE Waste and Fraud

Initiating at the Root: Interview on Ansell's Claims towards EU Regulators for Safer More Sustainable Protection

Ansell has sent an 'open letter' to the European Union PPE Industry Regulating Bodies. As a leading company in the Personal Protective Equipment (PPE) value chain, Ansell is a trusted global manufacturer with a history stretching back 125 years. Their core mission is to build a safer workplace for all. GIT SECURITY was interested in the hows and whys around the initiative and interviewed Rikard Froberg, President Industrial Global Business Unit at Ansell.

Rikard Froberg,
President Industrial Global
Business Unit at Ansell

Why did Ansell decide to write an 'open letter' to the European Union PPE Industry Regulating Bodies?

Rikard Froberg: Sustainability is becoming a priority, with issues such as resource scarcity and the global climate emergency putting it at the forefront of the industry's agenda. Our customers trust our personal protection solutions and routinely look to us for leadership. Ansell is guided by a responsible and responsive business strategy that encompasses our values and ambitions. Sustainability, as with safety and protection, is an equal part of these values, and our ambitions to build a – better society, better environment, and better business.

Why is Ansell applying its values to prompt change in the regulations?

Rikard Froberg: The recent European PPE Regulation (EU PPE regulation 2016/425*) provides an essential framework to ensure PPE in the European Union (EU) adheres to specific health and safety standards.

The 'open letter' we sent to the EU Commission and Industry Regulators included a request to present opportunities that contribute to our ambitions and benefit the wider industry; and to ask for support in delivering on this.

POWER & DATA
END-TO-END

PoE & Fiber Solutions — By Altronix

SECURITY CENTER

Deploy IP devices at remote locations utilizing fiber or hybrid cable...

Ethernet to Fiber Media converters & Hardened 802.3bt PoE Switches with or without integral power

Altronix®

Reflecting our acknowledged reputation in the global industry, we urged amendment of the guideline requirements, while requesting active encouragement for EU Member States to comply.

What does Ansell particularly hope to achieve by taking this action?

Rikard Froberg: Our motives are two-fold. It's in line with our commitment to build a better society, better environment, and better business. For better business, our aim is to create one single and harmonized recycling label for packaging materials and packaging waste. Ansell believes that recent initiatives taken by several Member States following the Commission's decision of Jan 28, 1997 - related to Directive 94/62/EC - to establish an identification system for packaging materials and packaging waste, are commendable. We fully agree with the urgent need to develop such a system, as it will help raise awareness among end-users about packaging and recycling packaging waste. However, we identified an issue for concern due to the unilateral action taken by some Member States.

Can you explain what this issue was?

Rikard Froberg: Ansell has observed the emergence of new rules and regulations in various countries, especially regarding requirements linked to the recycling of PPE, textiles, and so on, and the marking of packaging and packaging waste. Italian authorities now require manufacturers to add specific recycling or packaging waste labels on PPE packaging. Simultaneously, France, Portugal and Slovenia are working on similar regulations, but France requires a different logo on the packaging.

We consider it timely to warn against the additional complexity that could occur from the emergence of these new rules and regulations, and their potential to hinder free circulation of protection products within the EU. Such piecemeal individual local labeling could be confusing, with a negative impact on EU-wide awareness and end-user action.

What are the sustainability challenges and opportunities you have identified to build a better environment?

Rikard Froberg: A considerable portion of PPE is sold in the industrial field; whereby the employer must select the proper equipment for employees and train them to use it safely. Consequently, Instructions for Use (IFUs) are needed during the equipment selection process and for training purposes; however, they are no longer relevant during use.

While EU PPE Regulation 2016/425 doesn't expressly stipulate to supply IFUs in a paper format, the PPE Regulation guidelines require PPE products to be accompanied by a paper IFU, available in every EU language where this PPE is sold.

Ansell has identified a real opportunity to avoid further waste of natural resources, by allowing manufacturers to move to a sustainable solution using digital IFUs in business-to-business environments. These are already allowed for medical devices, so we requested the EU Commission and Regulators to amend the applicable PPE guidelines and encourage Member States in this direction.

What is the second focus of Ansell's aims in the letter?

Rikard Froberg: The second clear focus of the letter is to stem the flow of fake and dangerous PPE and help toward building a better society. Due to the unprecedented demand for PPE in the pandemic, we have seen a concerning influx of new - and even existing PPE brands – selling products in the EU non-compliant with applicable regulations. These often don't meet minimum protection levels, or they claim higher protection properties than they can provide. Despite this, their prices make them attractive to buyers.

Such practices are growing exponentially due to poor market surveillance and the absence of severe penalties to combat fraud. This increasing non-compliant PPE also creates an unfair competitive environment and could mislead customers, creating unsafe work environments and potential accidents.

The industry needs increased market surveillance. At Ansell, we are taking several initiatives to ensure we bring products to market that meet and exceed the regulatory standards and educate the market on the regulation. This includes putting in place strict release control criteria and continuous assessment of our processes and products against the claims we make,

so our customers and end-users can trust the products they buy. We are also training distributors on what they should be vigilant for and commit to report to the European Safety Federation cases in the market that are not compliant to the regulation.

Why does Ansell's letter stipulate that - there's no time to waste?

Rikard Froberg: We view this as a unique opportunity for EU Regulators to take the lead and facilitate a harmonized approach that will bring more clarity for PPE users regarding packaging, sustainable disposal and recycling of the packaging in the EU. We're convinced this will ultimately lead to a more significant and positive environmental impact.

Ansell views this as a chance to drive to the industry toward action that ultimately leads to shifts in attitude and ignites more significant transformation down the line, making things safer for the people who use and rely on PPE.

How would you underline your actions and expectations?

Rikard Froberg: We realize our goals are ambitious, but with the will and support of key regulatory bodies in aligning their actions and legislation - along with Ansell's commitment to improve the environment, society, and our industry - together we can achieve a positive outcome.

We urge EU Regulators and authorities for more market control and strict penalties when fraudulent protective equipment is brought into the European market for product integrity and everyone's safety. That's why we believe there really is - no time to waste.

More info on sustainability:
www.ansell.com/gb/en/about-us/sustainability

Source
* https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32016R0425

CONTACT
Ansell Healthcare Europe
Brussels, Belgium
Tel.: +32 25287 400
info@eu.ansell.com
www.anselleurope.com

Managed Ethernet PoE Switch, Server, and Video Storage Appliance

The next-gen Razberi ServerSwitch IQ Intelligent Video Appliance is a high-performance managed Ethernet PoE switch, server, and video storage appliance, part of a complete suite of appliances that provides large-scale video recording, scalability, reliability, and automated cybersecurity with remote management. The Razberi appliance allows cameras, access control points, and other devices to add layers of protection while lowering the threat of cybersecurity risks to businesses, all while reducing the network bandwidth requirement. Razberi provides a purpose-built Remote Monitor and Manage (RMM) service that monitors the entire video ecosystem (cameras, network, server, storage, and cyber security) and allows service providers and end-users to remotely manage and install operating system updates, critical security patches, and firmware.   **www.comnet.net**

Compact 12x Zoom PTZ Dome Camera

Idis has launched a new 2MP compact 12x zoom PTZ dome that is the smallest in its class and comes packed with high-performance features and smart functions. A key benefit of the new light and compact camera is fast and easy installation. Engineers do not need to remove the camera bubble, avoiding the risk of dust ingress and image quality compromise. The camera can be quickly attached to a wide choice of mounts with just a light-touch push-and-click technique. A triple safety wire support structure means safe installation and maintenance, making it an ideal choice for a wide range of indoor applications, from retail, hotels, and commercial offices to healthcare and logistics settings where wide-area, uninterrupted surveillance is critical.   **www.idisglobal.com**

Varifocal Multi-Imager Camera

3xLOGIC, a provider of integrated, intelligent security solutions, has released its new VX-20M-Surround-Raw varifocal, multi-imager, surround dome camera. Designed for applications that require multiple angles of view that a standard camera cannot achieve, it contains four 5MP varifocal lenses that provide separate video streams. It is therefore possible to deploy this single device instead of purchasing and installing several cameras. The varifocal lenses can be positioned in infinite configurations to allow end users to view and record what is most important. The multi-imager is equipped with WDR, audio, and alarm for enhanced video capture. Optional advanced analytics are available with a license for each channel. The vandal-resistant camera is ideal for both indoor and outdoor applications and, for greater coverage, three lenses can be positioned in horizontal views with the fourth providing a single vertical view on building exteriors or in large indoor applications.   **www.3xlogic.com**

Multiple Certification

Suprema has announced that its products and solutions have acquired international safety certificates to ensure the highest level of security and protection. The company's four-door access CoreStation control panel is its first controller that has acquired UL 294 compliance, a certification that evaluates the safety and reliability of the product. Its compact outdoor RFID reader, XPass D2, is SIA OSDP verified, meaning that the device conforms to the SIA Open Supervised Device Protocol (OSDP) standard and the related performance profiles. It ensures higher security by constant monitoring of wires and protecting with high-end AES-128 encryption. Suprema's BioStar2 access control and time and attendance platform has acquired ISO 27001 and ISO 27701 certifications, which certify compliance with Europe's General Data Protection Regulation (GDPR).   **www.supremainc.com**

Platform Integration

Vivotek, an IP surveillance provider, has jointly announced its partnership with global software automation provider Immix, in providing back-end solutions on the Immix Platform so that their customers can expand their surveillance needs without breaking the bank. This new integration provides access to Vivotek NVRs and enables versatile and convenient operation on video and audio management solutions. The NVRs are available in 4, 8, and 16-channel options with embedded PoE, requiring less hardware at each location. Also, the absence of license fees for pairing NVRs with IP cameras significantly lowers total ownership costs. Immix CEO Chris Brown asserted, "We are pleased to integrate with Vivotek and add their solid product line and market presence to our partner portfolio."   **www.vivotek.com**

Phone as a Convenient Access Card

System integrator Visma Megaflex just introduced a powerful new convenience in their systems: the option to use mobile phones to enter. Mobile phones provide a sensible, convenient platform for securely storing digital access credentials because everyone keeps their phones with them. Mobile phone locks, whether they use fingerprints, keywords or security patterns, also strengthen security further. Mobile access IDs are also simpler to manage for temporary users like maintenance personnel. Visma Megaflex deploys Idesco's 8 CD 2.0 MI readers in their system. These also read traditional MIFARE DESFire tags and cards, in addition to mobile IDs, and the mobile IDs integrate seamlessly into systems where physical tags are also managed. Since no user data is transferred or resides in external cloud services, user privacy is protected.   **www.idesco.fi**
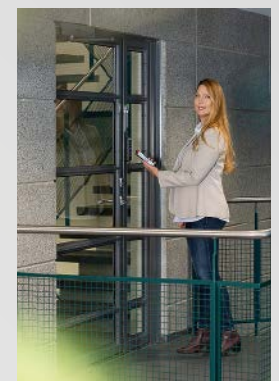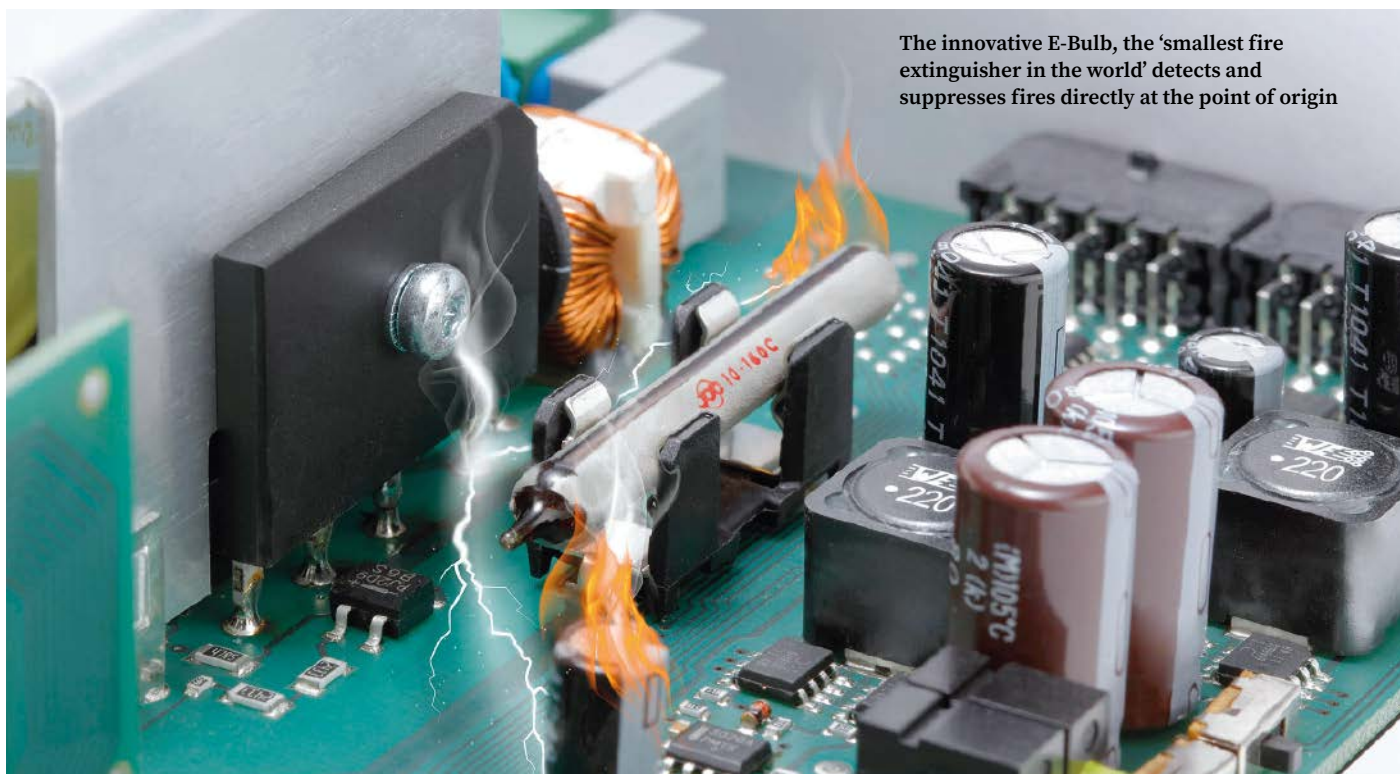
The innovative E-Bulb, the 'smallest fire extinguisher in the world' detects and suppresses fires directly at the point of origin

© JOB Gruppe

FIRE EXTINGUISHER

Right At The Source

A Tiny Fire Extinguisher Helps to Mitigate Fire Risks

An innovative and device-integrated fire protection concept can reduce the inherent fire risk that comes with any electrical cabinet, device and appliance; components so small that they fit inside electrical products, detect and suppress emerging fires directly at the point of origin and at the earliest possible point in time. This approach minimizes the fire risks for people and helps to prevent fire-related service interruptions and economic damage for operators and insurers.

Electricity is dangerous. Statistically, the fire services are called to a fire scene in Europe and North America every two minutes. Electricity, electrical systems and electronic devices cause one in three of these fires (Source: Institut für Schadenverhütung und Schadenforschung, Kiel 2020). In practice, there might even be more fires that are often not reported for fear of possible consequences such as investigations, raised insurance premiums or simply because prompt and competent intervention by the people who were there avoided more serious damage, particularly in industrial environments.

Reports of fires make it into the news regularly. Some recent examples include the tragic hospital fire in Western India in which 18 COVID patients were killed (April 2021), the severe fire at a subway station in Berlin (January 2021) or the devastating fire at the Timmelsjoch Historic Bike Museum in Austria in January 2021. Luckily, no one was injured in this fire.

Most often, only minor causes lead to all these fires, but they cause significant damage and operational downtimes, the evacuation of stations and costly business interruptions.

Devastating Impact

The impact of fires is frequently devastating – not only for the people affected but also for the companies that are economically linked to such an incident. Costs for repairs and replacement of damaged equipment, vehicles or devices often represent the lesser evil – the largest damage is caused by the concomitant service interruptions. In 2022, the well-known Allianz risk barometer listed these 'service interruptions' as the second largest risk for companies world-wide. In the last years only cyber security threads rank higher.

According to the German VdS (100% subsidiary of the German Insurance Association, GDV), a renowned institute for corporate security and safety specializing in fire protection, security and natural disaster prevention) , every third fire causes material damage of more than EUR 500,000, with the result that the affected companies often do not recover from the incident. Only 23 percent of the companies that were affected by fire can resume their business operations fully. More than 40 percent of the companies, however, have to discontinue their business after a fire (cf. 'Logistik Heute'). For owners, operators, transport carriers and insurers this means standstills, unhappy customers, cancellations and delays, long discussions, investigations and bureaucratic efforts.

RELEASE 2022

ergo-X
Outdoor Keypad

ergo-X keypad is the new user interface for lares 4.0 control panels, it is connected to lares 4.0 via the KS-BUS. The keypad case is compliant with IP65 protection degree so that it can be installed outdoors but its minimalist and simple design is also suitable for any residential or commercial type of environment.

ergo-X keypad hides the keys when it is in idle state, they light up by approaching the hand thanks to an integrated proximity sensor. It also integrates an RFID Tag reader to read Ksenia mini-tags, a multi-color LED is lit of the color related to the status of the system and to the scenario set up, feedback sound on keypress and operations. It can be configured as I/O from Ksenia Pro installer App.
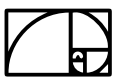
DESIGN

IP65
OUTDOOR/INDOOR INSTALLATION

SMART HOME ACTIONS

AUDIO FEEDBACK ON KEYPRESS

RFID TAG READER

Current fire prevention and protection standards are often cited as being sufficient to prevent fire-related accidents. Manufacturers of all kinds of technology (like power supplies, digital signage equipment, household appliances, production machines and infrastructure equipment) routinely look at fire protection just as the 'necessary evil'. Driven only by economic considerations, such companies just implement the minimum that is legally required without being aware of the potential economic impact on their own business, and the potential harm for their customers, as well as all the other stakeholders involved. If implementing current fire protection requirements were sufficient, one can ask why do fires still happen so frequently?

A burning passenger rail car near Berlin in Germany. Although no-one was hurt, the operator suffered a prolonged business interruption and huge financial damage

© Steffen Tzscheuschner

Insufficient Thought about Fire Protection

Behavioral studies suggest that one of the reasons why humans tend to repress thoughts about the risks of fires can be found in the typical pattern of thinking. The brain is 'wired' to use heuristic thinking in complex and unknown situations (cf. Mintzberg, "The Structure of 'Unstructured' Decision Processes", 1976). People are using their 'gut feeling' and trust their perception and senses rather than what knowledge and education would suggest. A typical example from the fire prevention industry is what people do when a fire alarm is set off. As long as there is no smoke or other obvious signs of fire (such as the fire brigade's emergency forces or first aiders

showing up), people tend to assume that this MUST be a false alarm because there is no fire to be seen or felt. Tragically, this often continues to happen until it is too late for evacuation or escape (cf. Kemerovo Shopping Center Fire, 2018).

Every Third Fire Caused by Electrical Devices and Systems

There is a wide variety of causes for electrical fires: faulty components, poor soldered joints, manufacturing faults, intermittent plug connections, impermissible operating conditions or sudden component failures. Users and consumers are then threatened by fire, resulting in product failures and even product recalls. Common protec-

tive measures like fault current switches, contactors or fuses often recognize a fault condition very late or not at all. Many of the fault sources cannot be directly influenced by the manufacturer or operator, which is the reason why such risks can often not be recognized or considered.

The existing fire protection concepts are of course very extensive already and their application saves lives and property in many places. The currently adopted fire protection model used in most industries relies on organizational fire protection (e.g. escape routes and fire protection assistants), technical fire protection (e.g. fire alarm systems or smoke detectors), structural fire protection (e.g. fire doors and walls) as well as defensive firefighting by fire brigades and first aiders. The existing standards, concepts and technical solutions are undoubtedly good – they work and save people. With the statistics mentioned above as a basis however, it may prove beneficial to consider further options to increase fire protection beyond the legally required minimum.

Device-integrated Fire Protection

Almost all fires start small. Many large fires could be prevented if an emerging fire was detected and extinguished early and directly at its point of origin. This is the approach taken by an innovative 'device-integrated fire protection' concept. Modern fire extinguishing components are so small that they can be installed directly onto printed circuit boards, inside power supplies and any other powered device.

© Bezirksfeuerwehrverband Imst

Minor causes often have major effects. A defective monitor caused this fire at a world-renowned motorbike museum in Austria in 2021

© Media Frankfurt, @photoschwarzinger

**LED advertising wall, realized by BenHur, with
E-Bulbs inside at Frankfurt International airport**

One related innovation is the E-Bulb, a robust glass bulb similar to the ones used in fire sprinklers. These bulbs, the size of commercial micro fuses (5x20mm, 5x40mm, 7x40mm), are filled with a non-conductive, non-toxic, NOVEC engineered fluid made by 3M. The glass surface is coated and electrically conductive, which means it can be integrated into the power supply circuit. The glass bulb is calibrated in such a way that if a defined trigger temperature is exceeded, it bursts and releases the extinguishing agent directly inside the device where the fire was detected. This extinguishes an emerging fire immediately. The selection of the suitable E-Bulb for a given application can be made, for example, according to EN15004-2. NOVEC has a very low evaporation point and becomes a gas at the moment of its release. This endothermic process effectively extinguishes even a high-energy fire through cooling, without leaving any residue of the extinguishing agent or causing collateral damage of the device. The temperature-induced activation also destroys the conductive surface of the glass bulb, interrupting the electric current flow over the glass bulb reliably and permanently. As a result, the electric fire cannot re-ignite from the power supplied.

The effectiveness and reliability of the patented E-Bulb has been tested and confirmed by UL, but also by accredited organizations like VDE and MPA, as well as by the German VdS (VDS 2344 and VDS 2562). Since the protected volume is limited by its compactness, typical applications for the E-Bulb are small, clearly defined enclosures and housings, such as power supplies, monitors and and display or control units of household appliances. By incorporating a small fire detection and suppression device like the E-Bulb, an electrical device like the presentation monitor mentioned earlier can be installed and operated safely in public and semi-public areas (e.g. hospitals, train stations, shopping centers and airports). Digital signage applications with integrated extinguishing protection are being operated at Frankfurt International Airport (and others) where they are also approved for operation along the critical escape and traffic routes.

Existing solutions such as display systems at airports and trade fairs, media pillars at stations, media cabinets in railway vehicles, even in on-board toilets and restaurants, as well as in simple fuse boxes in hotels all demonstrate the efficiency and simplicity of the implementation, even in non-industrial environments.

By supplementing existing fire protection measures with the innovative device-integrated approach to detect and extinguish a fire, and to interrupt the electrical circuit to prevent re-ignition, operators, manufacturers and suppliers in the electrical and electronics industries can develop and implement their creative ideas using new, smart technologies while meeting the highest possible fire protection requirements. With the need for ever more competitive products, manufacturers of electronic devices are faced with the challenge of ensuring operational safety, being economically and visually attractive as well as being able to integrate new technology easily and safely. In today's world, electrification can be expected to continue to rise and electronics are kept more often in 'standby' for remote control. Advanced and innovative fire protection is therefore of increased importance.

Early Detection and Extinguishing

The use of electrically-powered modern technology provides a great opportunity for succeeding in the market because customers demand more and more 'smart' features, convenience and digital user experiences. Manufacturers and operators of equipment have to integrate the latest technology to survive in the market. The risk of fire arising from all these electrical and electronic systems and devices is huge and can only be addressed effectively by innovative solutions that go beyond the requirements of existing standards and traditional fire protection concepts.

Reducing the risk of fire to zero is not possible. However, the adaptation of device-integrated fire protection with the smallest fire extinguisher in the world, the E-Bulb, offers an opportunity to extend existing fire protection concepts economically and to make safe products safer. For high-risk areas, the earliest possible fire detection and extinguishing directly at the fire's point of origin not only allow for the reduction of approval times and the cost of alternative solutions, but in some cases even enable the use of such technology as digital media technology in the first place. Risk mitigation through device-integrated fire protection: the state-of-the-art way to protect people and assets, avoiding environmental pollution from fires and protecting stakeholders from the economic impact of electrical fires – a concept that is of benefit to everyone.

TRAINING

As Real as Possible

TH Cologne is Developing a Virtual Reality Training System for Rescue Personnel

Every day and worldwide there are accidents, fires and other dangerous situations where people urgently need help. Rescue operations have to be practised of course so that they work without a hitch when an emergency occurs. An interdisciplinary research team from the TH Cologne (Cologne University of Applied Sciences) is now working on the 'Collaborative Virtual Reality Training System for First Responders and Civil Protection' (KoViTReK) project to find a solution that enables training for emergency operations to be carried out in conditions close to reality with the help of virtual reality technology. The Ministry of Culture and Science in North-Rhine Westphalia is supporting the project from its 'Fokus Forschung HAW-Kooperation' fund with around 250,000 Euro.

"Current virtual reality systems for rescue training are often not close enough to reality. The missing or very basic audio elements as well as insufficient visual effects prevent the proper immersion, the enclosure in the virtual environment. The significant problems so far have been, for example, the spread of light through flames and smoke as well as the direction of sound. We want to change this to make the operation feel as real as possible", says Prof. Dr. Arnulph Fuhrmann from the Institute for Media and Phototechnology of the TH Cologne.

The intention is to conceive and evaluate the training system on the basis of two concrete application scenarios. The first will simulate a house fire and the other a power cut in a hospital. The audible and visual elements will be created for both cases.

Interdisciplinary Cooperation

The interdisciplinary cooperation from the computer graphics, acoustics and civil protection departments will enable the integration of all the necessary elements into the simulation of emergency situations. Prof. Fuhrmann is developing the visualizations, such as realistic lighting and smoke simulation, with the help of algorithms, while Prof. Dr. Christoph Pörschmann from the Institute of Communications Engineering is creating the audio elements. Prof. Dr. Alexander Fekete from the Institute of Rescue Engineering and Danger Reduction is responsible for the requirements of such a system from the point of view of a rescue engineer.

Partners from real life such as the Dortmund Fire Brigade, the full-time Aachen Fire Brigade as well as the Technische Hilfswerk (the federal civil protection organization in Germany) are supporting the scientists in creating a true-to-life system. The training system will enable a number of people to practice simultaneously in a VR environment and interact with each other. As well as the VR and audio headsets, users will also be wearing their regular protective clothing. The immersion in the situation is intended to create stress, just as in a real rescue event. The research team will look at how much the learning effect can be increased in this way, while the aim is to find out whether rescue personnel who use the system in the future will be better prepared for such situations and can react adequately. The system will also be used to encourage new recruits - those interested in a career as rescue personnel can get an idea in advance if it is for them.

Government Aid: 'Fokus Forschung HAW-Kooperation'

CONTACT

TH Cologne
Tel.: + 49 221 82750
www.th-koeln.de

Firefighting Technology Continues to Grow Strongly

Manufacturers of firefighting technology in Germany achieved record sales last year. "With an increase of around eight percent to 1.2 billion euros, we were able to post a new all-time high in 2021. We are therefore coming to Hanover with momentum and full order books," says VDMA Managing Director Dr. Bernd Scherer, a good three months before the start of the Interschutz trade fair which will be held at the Hanover Exhibition Center from June 20 to 25. The investment mood of municipalities remains high, and manufacturers have their hands busy. The globally tense supply and logistics situation, but also the war in Ukraine, are both currently causing headaches for the industry. "Supplier parts and components of almost all kinds have become a scarce commodity on the world markets. Added to this are uncertainties in view of the war situation, especially with regard to components from the crisis regions. The current order backlog corresponds to a production period of almost a year," explains Scherer. Last year, the industry achieved visible market success in almost all product sectors – chassis, bodies, and equipment. The association forecasts a continuation of the bull market for the current year.   **www.vdma.org**

Wireless Technology Wins Praise

K-Mesh, a wireless fire detection technology from Kentec Electronics, a manufacturer of life-critical control solutions, is winning praise from the installer of a new system protecting the historic Chester cathedral. Brad Parker, founder of Charles Thomas Heritage Fire Protection, was tasked with specifying and upgrading the wireless fire detection system previously installed in the cathedral. The thick walls and lead-lined roofs and the other challenges that come with a building that can trace its roots back to 1093 meant that Brad had to think outside the box. He opted for Kentec's K-Mesh system, a technology that uses self-healing and configuring Mesh technology to deliver optimum levels of reliability and performance. It is available as part of a complete fire detection system with Kentec-manufactured panels, such as the Syncro AS panel and, in this case, the award-winning Taktis panel.   **www.kentec.co.uk**

Access Control for an Education Institution

As the home of the renowned St Andrews Prize for the Environment, the University of St Andrews has sustainability at the heart of its ethos. University managers sought an energy-efficient access control solution for student accommodation that respected and reflected these principles. A major challenge was that multiple different standalone access control technologies had been installed piecemeal at student halls over the years and university managers sought a more suitable, integrated solution. They chose Aperio battery-powered electronic escutcheons from Assa Abloy Opening Solutions. Approximately 1,600 doors have been equipped with electronic access control so far — without cabling. The Aperio devices integrate fully and work flexibly with both the university's existing central system and their student ID card. University security managers continue to enjoy the efficiency benefits of monitoring and controlling access from a single point and in real time, also for doors in many different buildings.

www.assaabloyopeningsolutions.com

VdS-Approved Thermal Imaging Systems

The Mobotix M16 VdS Thermal TR solution, consisting of a thermal imaging camera, special firmware, and additional components was approved by VdS Schadenverhütung, Europe's largest institute for corporate security in March 2022. A VdS-approved system can provide discounts on insurance premiums, or even enable insurance in the first place. Thermal Radiometry (TR) cameras from Mobotix with a calibrated thermal image sensor measure the thermal radiation in the entire image area and trigger an event when limit values are exceeded. This can be an alarm or a network message, or even the direct triggering of a fire extinguishing system. The thermal camera system, which can be installed at a distance of up to 60 meters from the heat source, can also react more quickly. Heat at the start of the fire is detected even before it has risen up to the ceiling. Unlike aspirating smoke detectors, the Mobotix M16 TR is not dependent on smoke development.   **www.mobotix.com**

COVER STORY

Very Versatile

Dallmeier presents Domera: Unique Combination of AI Analytics, Motor-Driven Triaxial Adjustment and IR/White Light Outside the Bubble

With the "Domera 6000" camera series, Dallmeier presents a completely new generation of dome cameras. The multi-talent camera delivers high-quality video analysis results even under the most demanding light conditions. This is supported by AI-based Edge analytics as well as image capture with the latest generation of sensors in four and eight megapixels.

With a theoretical total of well over 300 conceivable combinations, the modular Domera housing and mounting system is usable for most indoor and outdoor video applications. Rapid installation and adjustment to changed surroundings is assured by the "Dallmeier RPoD", with remote-controlled, motor-driven lens adjustment in three axes, the PTRZ (Pan Tilt Roll Zoom) function. For lighting, the first ever ring of IR and white light LEDs located outside of the bubble is used. The system thus eliminates the illumination problems associated with conventional dome cameras. This makes Domera one of the only cameras on the market which offers all these advantages in a single product.

Bold Claim in the Premium Segment
Particularly when specifications in terms of image quality, security and analytics performance are high, end customers and installers often have difficulty finding the right solution for their requirement among the wide range of available cameras: How good are image quality and analytics? How easy or difficult is it to set the camera up, and how difficult is it to adjust viewing angles or image sections afterwards? Are there any lighting problems, e.g., from scratches in the bubble or reflecting walls? And finally, questions on all aspects of quality and durability, and of course cybersecurity and privacy, are becoming increasingly important. With the new Domera 6000 camera series, Dallmeier makes the bold claim that it has the right answers to these requirements.

Edge Analytics with AI
Fitted with a high-performance SoC, Domera cameras can perform latest generation AI-based Edge analytics. Reliable detection and classification of objects such as people or vehicles thus enables a whole range of basic analyses such as People Counting, Loitering or Intrusion. Users can then depict many possible analysis

With over 300 conceivable combinations, the modular Domera housing and mounting system is usable for almost all indoor and outdoor video applications

"Loitering" is just one of the various AI-based Edge Analytics apps that allows user to create a wide variety of anlytics applications

with conventional IR dome cameras, in which tiny scratches in the bubble cause interfering reflections. Being adaptive, it also minimizes effects such as reflection from walls.

The motor-driven, triaxial adjustment with the Dallmeier "Remote Positioning Dome" - RPoD for short - saves setup time. Its PTRZ (Pan Tilt Roll Zoom) function enables users to adjust the image section and the area to be captured, and even to change them later from anywhere via web interface. Thus, a 90-degree rotation for corridor mode can be set up in no time. The initial configuration and setup for the camera is browser-based and does not require any additional software.

Well Over 300 Variants with Just 18 Components

An especially useful feature for installers: Theoretically, the Domera components can be combined to create well over 300 different products. This is made possible by an ingenious modular system of in total 18 components: four camera base models, various lighting rings and several housing and mounting variants. Moreover, support for Onvif S and T profiles means that the cameras can be integrated in any VMS system. Consequently, 90 percent of all typical video applications can be implemented easily and with utmost quality and security – with minimal training and low warehousing requirement on the part of the installer. For this innovative system, the Domera series has already received the Red Dot Design Award 2022.

"The customer's perspectives were central to the development of the Domera 6000 series from the very beginning. For end customers, we offer maximum image quality, and through the AI analytics a user advantage that far exceeds pure video functionality," says Dieter Dallmeier, Founder & CEO, Dallmeier electronic. "In turn, the installer is able to offer his end customer real added value – with minimal outlay for configuration, installation and setup. Combined with the quality for which we are known and the correspondingly low support burden, excellent commercial options for installers present themselves in this area too."

applications from these for their specific requirements using various parameters via the web-based user interface. By activating relays, and by supporting standard protocols such as MQTT, it is possible to automatically trigger various related actions, e.g., activating 3rd party lighting or alarm systems.

In addition, the loudspeaker available as an option allows manual or automatic audible communication. Regular updates serve to guarantee that the neural networks are always up-to-date and undergoing constant training. Upon request, the Dallmeier experts will also develop or train neural networks for customer-specific requirements.

Highest Image Quality, and Rapid, Web-based Setup

The 6000 series offers high image quality with four or eight MP resolution, HDR functionality and extreme light sensitivity, and the cameras are consequently ideally suited for indoor and outdoor use under difficult light conditions. A further special highlight is the completely new adaptive IR and white light lighting system, for which a registered design application has already been filed. Here, the lighting is integrated in the housing ring, which means it is mounted outside the bubble. This design guarantees a long service life, as it eliminates the problems associated

Dieter Dallmeier, Founder & CEO, Dallmeier electronic

VIDEO

Game, Set, and Match

How the UAE's Premier Sports Complex is Protecting Fans with an Advanced Security System

To protect 1.7 million visiting sports fans each year, Zayed Sport City – the largest sports complex in the United Arab Emirates (UAE) – has deployed a site-wide security system from Hikvision. Incorporating more than 670 integrated cameras, the solution reduces workloads and costs with cool AI features, while also providing high-resolution imaging to boost security across the site.

The need for high-resolution and automatic video security had been recognized at Zayed Sport City, which has been named the UAE's number one sports destination and welcomes more than 1.7 million sports fans each year. The site incorporates a stadium, ice rink, bowling center, tennis center and a range of other sports facilities. With such large numbers of people moving around the site, there is always a chance that accidents and other incidents could occur – potentially putting visitors to the complex at risk.

The key to preventing accidents and keeping sports fans safe is to effectively keep track of all areas of the complex during sports events, and to respond quickly if anything goes wrong. But with many hundreds of cameras needed to provide full coverage of the site, the resulting video streams are extremely difficult, if not impossible, to be processed manually.

As an additional challenge, the sports venues and facilities need to keep an eye on very large spaces, often with very high ceilings. This means that high-resolution

security cameras are needed to provide clear imaging at significant distances, with cameras often mounted high up on pillars, posts, or ceilings.

Multifunctional Operation

To address these challenges, Zayed Sport City needed a security and safety system that could protect all areas of the site – without the excessive workloads associated with manual approaches. The chosen solution is a multi-functional, stadium-wide security system from Hikvision. This incorporates

Hikvision cameras cover all the sports facilities inside the complex as well as spectator seating and parking areas

License-plate recognition (ANPR) technology is built into cameras in the stadium parking areas

The stadium welcomes more than 1.7 million sports fans each year

all the cameras and control room equipment needed to protect the site, 24 hours a day. The solution incorporates around 670 Hikvision cameras with different functions and types that were deployed during two major project phases. These are being used to protect all of the sports venues and facilities inside the Zayed Sport City, as well as spectator seating areas and parking areas.

Besides offering high-definition imaging (with 2 and 4-megapixel resolution across the Hikvision bullet and PTZ camera palette), selected Hikvision cameras also offer on-board AI capabilities to automate key security tasks. One example of this is license-plate recognition (ANPR) technology built into cameras in the stadium parking areas, which are increasing security and supporting efficient parking operations. AI capabilities also allow the security team to search back through video footage much more quickly and easily when investigating accidents and incidents.

VMS Integration
All Hikvision cameras have been integrated into the Zayed Sport City Video Management System, ensuring that all elements of the solution work in harmony to protect visitors to the stadium.

This brings improved safety, efficiency and scalability for site security management, while many routine security tasks can be handled automatically, reducing the risk of missed incidents, speeding up responses, and reducing staff workloads and costs. Khalid Al Mutawa, Director of Operations for Abu Dhabi Entertainment Company, the company that manages and operates Zayed Sport City, says, "Streamlining our processes with this system has allowed us to work more efficiently. The automated security alerts and the HD Video help us to respond quickly and work with peace of mind. It was critical for us that cameras and other equipment deployed in phase 1 and phase 2 would integrate easily with our currently used VMS, with no compatibility issues. Hikvision offered a fast and easy solution, and full coverage of the site was installed on time."

Increased Operating Efficiency
With the ability to search through video footage quickly and easily to investigate accidents and incidents, the security team is achieving major time savings compared to reviewing video manually. "The Hikvision system's AI features are very valuable in investigating incidents and it reduces the time required by our staff significantly" says Khalid Al Mutawa. "This frees our security team up for our core activity: keeping visitors safe and ensuring that the complex is secure at all times."

The fact that the cameras use onboard AI capabilities has made it cost-effective for Zayed Sport City to deploy the latest security technologies quickly, across the entire site. Additionally, new AI capabilities – such as the ability to locate and help unaccompanied minors or to count people to prevent crowding – can be added cost-effectively in the future, with no need to replace existing control room equipment or software.

CONTACT
Hikvision Europe
Hoofddorp, The Netherlands
Tel.: +31 23 554 277 0
marketing.eu@hikvision.com
www.hikvision.com
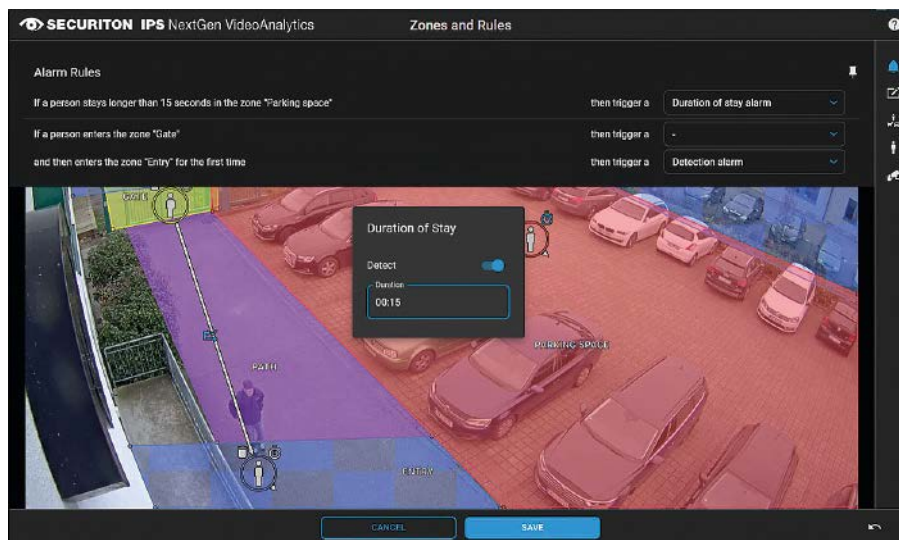
New analytics capabilities detect loitering in pre-defined areas

VMS

Further Functionality

A Video Management System Software Update

The latest software release from IPS Intelligent Video Software, Securiton's technology brand, has a lot to offer with new, helpful developments. Both the IPS NextGen VideoAnalytics and the Client have been expanded with practical functions in view of future applications for even more user friendliness.

A further two important functions have now been integrated into the new generation of NextGen VideoAnalytics with the aim of combining all IPS' video analytics. On the one hand, alarms can be triggered if people stay in an area for too long. On the other hand, detected objects can be masked so that they are not recognizable. Previously, licenses for these two functions had to be purchased individually and were therefore more expensive. The combined video analytics are now available for fixed cameras and can be easily configured.

The newly integrated analytics function to protect privacy ensures that persons or objects are not recognizable in order to comply with data protection guidelines, for example. The user can mask an entire zone over a large area or make moving persons and other objects disappear behind a colored area. Zone and object masking can be set to be reversible or irreversible, depending on the license. The detection of people loitering can also be configured very easily. The permitted dwell time for a person or an object can be set by clicking on an object symbol that has previously

been placed in a zone. If it exceeds the set value, an alarm is triggered.

Rules and Alarms
The number of independently adjustable rules has also been increased from two to three. This gives the user even more flexibility in the various application scenarios, such as entering a zone, staying in a zone for a longer period of time or masking people or objects within the zone. The corresponding alarm type can be set for each rule. "By adding the two functions of privacy protection and loitering detection, the new analytics are even more powerful," says Peter Treutler, director, IPS Intelligent Video Software. "The user benefits from simple operation and the freedom of being able to individually configure various applications and being well prepared in the event of danger."

With 3D support and georeferencing, IPS NextGen VideoAnalytics can now also control PTZ cameras. The 3D coordinates are determined and, in combination with the IPS Dome Tracker video analytics, intruders are automatically tracked without manual intervention by the operator.

Easy Searching
The IPS NextGen Client also offers remarkable new features - for example, a user-optimized search function that facilitates the subsequent search for incidents. The operator has three options for the recording search: he can search directly in a camera list, check only the alarm recordings or view all recordings. In addition, the time period in which the search is to be carried out can be set. The operator can refine the search further with versatile filter options. IT security is also not neglected in the new release: the latest TLS 1.3 encryption standards are applied that only allow login with authentication and strict password functions, both in the client and for the video manager itself. The Windows 11 and Windows Server 2022 operating systems are also supported.

CONTACT
IPS Intelligent Video Software
Munich, Germany
+49 89 4626 1680
ips.securiton.de
ips@securiton.de

VIDEO MANAGEMENT

Three Cases

What Cleverly Thought-out Video Management Solutions Can Do in Logistics

In a globalized, increasingly networked business world, logistics companies are facing new tasks and requirements that they have to cope with or react to in order to remain competitive.

A rapidly growing online trade and the associated enormous increase in dealing with private customers and their special features in terms of accessibility and punctuality require a reorientation of logistics processes. Open borders and simplified, Europe-wide working conditions also lead to an increase in competition within the logistics industry. Among other things, this creates cost pressure to which a response must be made.

Organized Crime in Logistics
In addition, the industry is increasingly affected by organized crime: the damage caused by theft within the logistics centers is enormous. In the meantime, entire trailers are being stolen from depots. Theft from moving trucks is also an increasingly popular method of criminal gangs. Apart from the damage caused by slashed loading tarpaulins, stolen vehicles, the insurance damage caused by stolen cargo and the resulting loss of customer trust can no longer be discussed away.

Why Video Management is an Intelligent Choice
Establishing a connection between the requirements described above and the targeted use of a video management solution sounds implausible in the first approach.

Certainly, the entrepreneurs have reacted and, through the use of video surveillance, can now in many cases provide proof of when, where and by whom a theft was carried out on the site of a logistics center. Logistics-specific certifications also ensure that these records are standardized and meet the purpose. But even if the worst comes to the worst, the search for the right video data shows that the search is time-consuming and complex. Often revenge is taken here that the investment in the system was kept small and in retrospect causes significant personnel costs in dealing with it.

Modern video management systems can do much more: they represent nothing else than a form of data analysis and processing, as we know it from other systems. Intelligent video management solutions today are able to easily evaluate video and other data, link it to other data sources in a company, establish relationships, trigger actions and thus reduce the search for essential information alone to a fraction of a second. That alone is the simplest form of intelligent automation of the system.

In addition, cleverly thought-out video management solutions make it possible to deliver an important operational share as part of the entire logistics process and the associated subsystems and, above all,

a financially easier to assess advantage in terms of added value.

This exploitation of this potential and the extended functions must therefore have significant effects in the selection of such a system. It starts with the planning: the questions that you have to ask yourself as an investor are no longer system-related alone. You are no longer limited to the question of the number and resolution of the cameras, the functions in the video management software and ultimately the price. Rather, the search for an answer to the company's challenges to be solved in the operational area is oriented. The focus is on the process, not the system.

Furthermore, however, it also requires a rethinking of the participation of the individual departments of a logistics company: Decisions for a system and also the use of it are now based on the topic of "security" as well as on other users such as operational management, dispatching, fleet management, etc.

To illustrate what an intelligent video management solution can do, let's look at some practical cases:

Case One: Simplified Claims Management
As already mentioned at the beginning, a logistics company is increasingly address-

ing private individuals as recipients of shipping goods due to the high increase in online trading. This makes the process of receipt more difficult: often the recipients are not reachable, parcels are either deposited at agreed locations or accepted by neighbors. The acknowledgement of receipt, also a guarantee for the perfect condition of the goods, is provided by the deliverer or neighbor. It is by no means an isolated case that the regular recipient reports the imperfect or damaged condition of the goods to the logistician after a few days and thus initiates an insured event. Some companies have therefore begun to provide almost complete proof of the integrity of the goods from delivery to loading into the delivery vehicle. With the help of video cameras, both a snapshot of the package and a short environment video are stored in a database during each scan process and linked to the scanner data . The environment video serves to clarify in the event of damage. If a customer now reports a damage, the claim manager can use the barcode to track the entire course of the package in seconds and to initiate claim processing cost-effectively and verifiably.

Case Two: Automated Access Control
Access control and allocation to the loading ramps can also be automated using a video management system. As a result, both the security against theft of vehicles can be increased and personnel costs can be reduced. At the entrance and exit to the company premises, the license plates of the towing vehicle and trailer are recorded by video camera and transmitted to the logistics software or an ERP system. This compares the data and issues a release for entry or exit to the video management or barrier system. At the same time, it

transmits information to a module of the video management system, which shows the driver via a monitor at the entrance to which loading ramp he has to drive or whether he is only in a waiting position. This automation enables a much faster process at the entrances and at the same time prevents towing vehicles from entering the loading yard that do not have access rights. Or that towing vehicles leave the yard with the wrong trailer. If this solution is now extended by using document scanners for freight documents in the entrance area, a fully automated system is obtained in which the video surveillance, which is already necessary, makes a major contribution to automation and thus justifies its investment.

Case Three: Securing Vehicles
A critical aspect in the protection against theft are still the journeys between the logistics centers or to the addressee. Here it is increasingly happening that organized gangs steal entire trucks or at least empty them. Unmonitored and overcrowded parking spaces on motorways at night contribute significantly to this. Today, intelligently designed video management software can also be installed on computers specially designed for vehicle and fleet operation and thus an overall system can be operated as a remote part. These mobile video solutions not only enable the recording of cameras permanently mounted on the vehicle, manufactured for tough mobile use, for example to actively monitor the outer skin of the vehicle. At the same time, they also offer the possibility to record and evaluate GPS data, information about the technical condition of the vehicle. In this way, such a system can pass on and alert information via the mobile networks if

necessary. Deviations from the plan route, live tracking of the route of stolen vehicles, access by opening the loading doors, prolonged stay of people in the vehicle area in parking lots, alerting in case of technical problems; these are scenarios that help to better protect the vehicle and the load and thus turn the investment in an extended video management system into calculable advantages.

Conclusion
The challenges facing logistics entrepreneurs today are diverse and great. As part of the entire logistics process, an intelligent video management system geared to customer needs plays an important role apart from its task as a monitoring instrument. With its extensive functions and automatisms, it represents a solution that not only causes costs, but rather offers high added value and whose investment includes a return on investment. Therefore, it is worth thinking about what needs an already necessary solution can offer them.

Author
Udo Schneider,
Director Sales and
Business Development
at Mirasys

Konica Minolta: Intelligent Video Solutions and 3600 Cameras

Konica Minolta Business Solutions has announced that its Intelligent Video Solutions and Mobotix c26 3600 cameras are protecting pupils, staff, and property at The Sweyne Park School in Rayleigh, Essex. The comprehensive 3600 vision capability has enabled the school to reduce a number of analogue cameras whilst also enhancing the quality to 4K resolution. The solution has also provided The Sweyne Park School with the flexibility to install the equipment themselves, without expensive third-party subcontractors. "It's so easy to install that we can now fit and configure additional cameras within 20 minutes. The quality of the images returned are second to none, providing clarity that is above and beyond what our previous solution would provide," commented Dan Joslin, Network Manager at The Sweyne Park School. "In addition to the 360 degree viewing, the solution provides comfort that there won't be any blackspots in viewing, providing 24/7 security for everyone within the school grounds." The school is using the solution to survey the corridors, dining rooms and vulnerable areas. Konica Minolta's IVS and cameras also deliver unrivalled levels of cyber security with powerful inbuilt and constantly up-to-date end-to-end cyber protection against hacker attacks – at no extra cost. This market-leading technology robustly protects the wider IT systems of the school, along with the paramount safety of pupils and staff.

PERIMETER PROTECTION

Cargo Incoming
Abu Dhabi: Khalifa Port Installs Perimeter Protection

Khalifa Port installs Navtech's AdvanceGuard to increase their perimeter security protection on land and over water, retaining its credibility as a safe and secure cargo handling facility.

The Challenge: Protecting the Perimeter on Land and Sea

Khalifa Port is a state-of-the-art, deep water cargo handling facility, which has established itself as a world-leading facility and as such has built a solid reputation. To maintain this status, it was recognised that tighter security measures surrounding Khalifa Port, both on land and sea needed to be implemented. Due to the complex geographical location, Khalifa Port required a security solution that would provide perimeter detection both over water and on land.

This solution needed to accurately and quickly detect approaching vessels, boats, vehicles and intruders and that could effectively operate in all weather and light conditions 24/7, providing 360° perimeter protection. It quickly became evident that Khalifa Port were not only looking for a suitable technology that could effectively operate across both land and sea, but they also required a solution that they could have complete confidence in.

The Solution: Radar-based Perimeter Detection with PTZ Camera Integration

The project was awarded to the system integrator partner Green TSI who specialise in installing security projects. Navtech Radar was specified due to the solutions' ability to meet the complex geographical landscape requirements, set by the exceptional parameters of the port. The first phase was considered as a proof of concept (POC) to ensure that the solution would meet Khalifa's requirements. Five radars were installed, which protected an 800 m perimeter.

Wide Area Coverage

Navtech offered to design a site diagram and a full site survey to ensure maximum optimisation. Following a successful POC trial, the solution was then rolled out to the second phase. This consisted of a further eight radars, which increased the total protection of the perimeter to approximately 3700m and a total combined area of 500 m² of continual monitoring. The HDR251 radar was selected due to its 500 metre detection in all directions and range resolution of 0.175m, providing the accurate and reliable performance that Khalifa required.

Reliable Detection and Tracking

AdvanceGuard intelligent rules-based software continuously monitors inside and outside the port's perimeter. It automatically generates an alert when there is a breach in rules. Unlimited targets are displayed on a user-friendly interface, pinpointing their exact location. Its reliable detection is unaffected by adverse weather or light conditions.

Camera Integration

AdvanceGuard was integrated with the existing Pelco PTZ cameras, automatically directing the cameras when movement is detected. The entire system provides the port with wide-area detection solution that not only detects both inside and outside of the perimeter, but also provides full coverage across land and water.

Summary

The project quickly evolved from a POC, to integrating radar technology as the port expanded, proving the accuracy and reliability of the solution. Following the successful installations of both phase one and two, Khalifa Port have increased their total perimeter protection to approximately 3700 m, giving a total combined area 500m² which is being continually monitored in all weather and light conditions. By using AdvanceGuard, Khalifa Port have the complete reassurance that they have protected their operations, employees and the reputation of the port as a safe and secure environment and retained its credibility as a world-leading cargo transit and handling facility. Khalifa Port has recognised that the Navtech Radar solution has not only met but surpassed their requirements.
Testimonial

"Green TSI recommended AdvanceGuard, due to it being recognised as highly reliable solution, that would perform exceptionally well, in a challenging environment. This solution not only increased their perimeter security protection on land and water but to also ensure that they retained their credibility as a safe and secure cargo handling facility," says Junaid Iqbal Mizra, Contract Manager Green TSI.

© Photo Gallery - stock.adobe.com

INDUSTRY OUTLOOK

Product Compliance and Green Deal

Supply Chain Issues in the Fire and Security Industry

Since the corona pandemic introduced the world to the concept of "the new normal," nothing is normal anymore. A simple incident can be disastrous for something as vital as the supply chain as we have seen with the blockage of the Suez Canal. The essence of that chain is to give companies the certainty that raw materials and components are available in order to produce the finished goods.

The pandemic resulted in lockdowns, and a high demand because of digitization together with economic recovery. This meant that this certainty is challenged. When manufacturers are looking for alternative material and components they can face re-certification of their products, or new developed products cannot be released. As a result of this existing products must stay longer available. The fire safety and security market is highly dependent on electronics and with that the industry is affected by the supply chain crisis.

Supply chains are formed by complex connections between companies. It starts with the raw materials and ends with finished goods for industry and end user. One chain can include up to thousands of companies. This is not a problem because, thanks to proven forecasting methods, the activities of the companies in the supply chain are precisely coordinated. This considers demand, supply, seasonal influences or specific characteristics of regions. What is not considered - and what is not possible - are unknown factors. These can lead to the forecasts no longer being correct. The well-oiled machine of the supply chain then quickly starts to creak and squeak.

Covid-19
One unknown factor the world faced in 2019 was Covid-19. This made it clear that society is not prepared for events that are not likely to happen but can have a major impact on society. Unfortunately, the start of pandemic happened in a country where a large part of the world's production takes place. For years, Western companies have located parts of their production there. When the production heart of the world temporarily stops beating, the world comes to a standstill. Problems in the supply chain are a direct consequence.

Several industries had problems even before Covid-19. Producers of chips, computer parts and other components needed for the digitalization of our society were already under great pressure. The production capacity of these goods is limited worldwide and the slightest change in demand can cause supply problems. This was already the case with smartphones, (game) computers or televisions. Chips had already entered the automotive industry on a large scale, and with the electrification of this industry, the demand for chips soared. We see a similar development in industries and parts of society where the (Industrial) Internet of Things is becoming commonplace.

Risky Dependencies
The consequences of the corona crisis have led many governments to recognize that the high dependence on producers out of one region poses a great a risk to certain sectors. For example, the fact that many European countries have no production capacity for facemasks which were needed during the pandemic, is perhaps the best example of this. For electronic chips and components we face the same challenge; to reduce the risks there is simply a need for more and better distributed production facilities. In the pursuit of lean manufacturing, production has been outsourced to Asia which means that a shutdown of factories in one country can have a global impact. The EU also recognized this even before the pandemic. Accelerated by the corona crisis, the EU is focusing its policy, among other things, on increasing domestic capacity and diversifying the number of suppliers.

Following the rapid spread of the coronavirus in China, European companies were affected. The lockdowns introduced in China led to a virtual standstill in production and restricted the freedom of movement of residents, which also brought logistics providers to a standstill. As quickly as companies were caught off guard by these lockdowns, the recovery in demand was also swift.

For many companies that were caught off guard by global lockdowns, the speed of recovery is almost as insidious and led to another supply chain crisis during the pandemic. Increased consumer spending and thus demand for products, combined with delayed transportation by sea and air caused major shortages and record backlogs. The tightness on container capacity is expected to continue for some time. This will not help to clear shortages of electronic components, which is expected to continue for some time.

Effects on the Fire Safety and Security Industry
The supply chain crisis caused by the pandemic also affects companies in the fire safety and security industry. The effects not only concern the manufacturers of equipment but also companies in the field of ser-

vice and maintenance of systems. Outside this there are other areas that can impact building safety. An example of this is that recommended emergency escape routes that were in place before the lockdowns are now mixed with the one-way traffic signs intended to allow employees to pass at a safe distance from each other.

Manufacturers of electronic fire safety and security equipment are affected by the disruption in transport and shortages on natural resources and core materials. Covid-19 has shown that unexpected events can shatter the basic premise that materials will be easily accessible, disrupting supply chain performance. The chain reaction initially caused by the shutdown of factories in countries effected not only the supply chains but also the workflows within and between companies.

Product Compliance
Paul van der Zanden, General Director of Euralarm adds: "Another relevant topic that affects our industry is the compliance of the products that the industry delivers. With electronic components not being available due to the supply chain problems, manufacturers need to reconsider replacement of parts that aren't available. However, with the replacement of certain components, the conformity of the final product may also be at stake." This could make it necessary to have the product retested and recertified. High (and unnecessary) costs could result from this.

When service and maintenance companies were faced with problems in reaching the customers during the pandemic, these organizations learned other flexible ways to stay in contact with their customers. Many industries and businesses have started modifying their operational methods. They are now operating their business online. The fire safety and security industry is doing the same by starting virtual offices and using remote service and diagnostic tools to support their customers.

Customers are moving to hybrid working models which are applied throughout society and could lead to downsizing or repurposing of buildings. This also can require that the fire safety and security requirements need to be adapted to the new use or size of the building.

Effects for the Green Deal
Securing a sustainable supply of metals and minerals used for components in fire safety and security equipment is also key to meet the energy and climate targets for 2030 and beyond. The European Green Deal aims to make the EU's economy sustainable. That creates many opportunities for the European society and industry in the current context of both the climate crisis and the Covid-19-outbreak. However, the transition towards green technologies, like renewable energy, e-mobility and stationary energy storage relies heavily on critical raw materials, such as cobalt, neodymium, tungsten, etc. and on new products and services. Both globally and in Europe it is expected that the demand for these materials will continue to increase. This can create challenges for the Green Deal. The impact of extracting and processing these resources is high while the supply chains are often not transparent and may lack traceability. Another challenge is the recycling of the materials. For most critical raw materials, the recycling efficiencies are low while the dependency on non-EU countries is high and still increasing.

The green ambitions of the EU could therefore also lead to certain activities being brought back to the West either to reduce the dependency of non-EU countries or to avoid CO2 emission as result of transporting goods from other parts of the world to Europe. This could lead to shorter logistics chains and more sustainability in several sectors. In that sense the current crisis in the high-tech supply chains contributes to a greener world and a stronger Europe.

CONTACT

Euralarm
Zug, Switzerland
secretariat@euralarm.org
www.euralarm.org

IP Cameras Use Existing Coax Network
In coordination with Advantex Network Solutions, Hitachi Rail needed to replace an outdated analog CCTV system with a new IP surveillance solution. The customer wanted to deploy IP cameras throughout the Hitachi Rail Ashford Depot in the southern region of the United Kingdom. However, the installation of CAT6, fiber optic cable, and additional networking closets threatened the project with high costs, complexity, and business disruption. Advantex Network Solutions suggested leveraging the existing coax cabling using Ethernet over Coax (EoC) solutions. NVT Phybridge CLEER switches deliver up to 50 watts of power (PoE++) and 10/100 Mbps symmetrical, full-duplex, over coax cabling with up to 6,000ft (1,830m) reach, eighteen times farther than standard solutions. The new CCTV was installed within the Ashford Hitachi depot across all the external stabling, covering the whole perimeter and access/egress to the site. The system is easily expandable, as the customer can deploy extra IP cameras using the EC4 (NV-EC-04) adapter, which enables up to 4 IP endpoints from a single coax cable run. **www.nvtphybridge.com**

Mobotix: VdS-approved Thermal Imaging Systems For Early Fire Detection
The Mobotix M16 VdS Thermal TR solution consisting of a thermal imaging camera, special firmware, and additional components has been approved by VdS Schadenverhütung GmbH, Europe's largest institute for corporate security, since March 2022. Mobotix customers can therefore be sure that they will be warned of fire damage as early and as effectively as possible and know that, despite the optimum protection, any damage that occurs will be settled quickly and comprehensively by the insurance company. In addition, a VdS-approved system can, if necessary, provide discounts on insurance premiums or even enable insurance in the first place. The VdS-approved fire protection solution opens up new sales potential for Mobotix AG and its partners, especially around certified fire alarm systems. While Mobotix thermal technology already provided the best early fire detection before, the video systems with their recognition can now also be integrated into existing VdS-certified fire protection systems. Detecting fires reliably and as early as possible is the goal of early fire detection that Mobotix has been pursuing for a long time with its camera technology – to intervene quickly, prevent damage and protect people. **www.mobotix.com**

Chinese mega-airport Chengdu Tianfu International equipped with video security and voice alarm

SPECIAL FOCUS

Solutions for Airport Protection

Latest Airport Security Solutions, Applications and Products

SPECIAL FOCUS

GIT SECURITY has collected some of the latest airport security systems. With this article, readers fly through some application stories, land on robust systems, and roll over some products that are especially suitable for airport application.

From a security perspective, airports are one of the most complex facilities to secure. There are many different requirements: From people flow and identity management to runway security and the complex's expansive perimeter. Monitoring and securing vehicles inside and outside the building is another critical topic. Many thousands of visitors should be safe every day while criminal activity should be identified quickly. On top of that, alarm systems should reach all passengers, both acoustically and visually. In addition, employees on the premises must be taken into account in the security installation: Who is allowed to enter which door at which time? Simplictiy in a such complex scenario and premise is key.

Starting the overview with an architectural problem, in addition to the already existing highly complex building structure of airport facilities, Chengdu Tianfu Airport was equipped with a video and

voice alarm system that had to fit into the architecture.

Chinese 'Mega-Airport' Chengdu Tianfu

Bosch has equipped the Chinese mega-airport Chengdu Tianfu International with video security, a PA and voice alarm system, and a conferencing solution, ensuring safety and security for passengers and airport staff as well as enhancing comfort

© Fujinon

Powerful 1/1.8" image sensor with long focal length by Fujinon

and ease-of-use for travelers. Chengdu Tianfu International, in Sichuan province, serves China's quickly booming 'garden' megacity, an emerging hub for commerce, culture, and finance – with the new airport pegged to be the third-busiest for airport traffic following Beijing and Shanghai. The installation of the audio and video technology was customized for the unique architectural requirements of the airport complex, including two terminal buildings that reference the ancient Golden Sun Bird totem unearthed in 2001 from Chengdu City's Jinsha Ruins. Due to the unique design of the terminal buildings, 'standard' security cameras were not appropriate for installation as the ceilings were far too high for traditional solutions. Bosch Flexidome panoramic cameras were integrated into the interior design of the building and were either installed on walls or concealed within information boards. Each panoramic camera is able to monitor a semi-circle area with a radius of 25 meters, a detection

range of 25 meters in distance, and with a 180-degree viewing angle. This allowed the airport to install far fewer cameras, cutting the total number down by 75% from 4,000 standard cameras for a typical project of this scale to 1,000 panoramic cameras – thus saving costs on the cameras as well as on wiring and installation.

Monitoring the Runway
In the flight area, the airport deployed four 4K-resolution Dinion IP cameras to monitor the runway. As this area of the airport is very long, stitching software is used to combine the images of these four cameras into one complete image, covering the entire runway and allowing Chengdu Tianfu to monitor the whole take-off and landing process.

Fujinon's cameras are another example for security products that are suitable for long-range runway surveillance. The Fujinon SX801 camera system is a further development of the Fujinon SX800 with Full-HD resolution and a stabilized 40x zoom lens. Thanks to its powerful 1/1.8" image sensor, the long focal length range of 20 mm to 800 mm and state-of-the-art image processing technology, the Fujinon SX800 and SX801 are ideally suited for advanced long-range surveillance applications to protect critical infrastructure and transportation networks, including airports, harbors, highways, borders, and the environment. Unlike the Fujinon SX800, the SX801 can output three streams in parallel. It also comes with a new host software for easy configuration, playback and live streaming.

Challenges of Airport Perimeter Protection
When it comes to network video, Axis Communications, for example, has some more ideas and extra recommendations: Adding a network video-based system to traditional security measures provides highly reliable intrusion protection for the aerodrome with 24/7 remote monitoring capabilities. A combination of thermal technology and video analytics, detects and distinguishes actual intrusion risks from wildlife and other causes of false alarms. Further, security radars and PTZ cameras track movement and identify suspects. And when integrated with network speakers, pre-recorded or live messaging can be used to deter their advance. In addition to being highly effective, a modern video-based surveillance solution is cost-effective; one

that can reduce the airport's total cost of ownership (TCO) over time. To calculate the exact savings for any specific airport requires both a desk study and an on-site visit to determine equipment needs and installation costs.

Stansted Airport with CCTV for Parking
London Stansted Airport has installed Videalert CCTV enforcement cameras to eliminate the incidence of tailgating as drivers attempt to leave the drop off zones and short term car parks without paying. The cameras were switched on in February 2021 and were supplied as part of an ongoing contract with NSL, a UK provider of parking enforcement services,

At Helsinki airport, Perimeter Protection Group installed EntraQuick quick folding gates and full-height turnstiles

which includes back office processing and debt recovery services. According to Steve Mills, Surface Access Manager – Landside Operations at London Stansted Airport: "NSL has provided us with a cost-effective enforcement solution that will enable us to rapidly achieve high levels of compliance, particularly in respect of the repeat offenders that try to avoid paying their parking charges. This has been a particular issue in short term car parks where people have routinely stayed two weeks without paying. The cameras will help us to eliminate lost parking revenues and improve safety for all passengers around the airport."

Fences
Now, let's take a look at some fences: CLD Fencing Systems, for example, offers profiled security rated and non-security rated Rigid Mesh Airport Fencing Systems, the Ultimate Extra and Ultimate Extra SR1 airport fencing system. Available in Heights up to 3.0m it features a unique mesh aperture of 165x25mm on 6mm nominal wires with 25mm top edge projection. Zaun is another provider for fencing systems with

a wide range of solutions, suitable for use at airports. From high-security LPS1175 security-rated fencing and gate solutions to PAS 68, crash rated fencing, airport fencing is a core part of the company.

Helsinki Airport with Gates and Turnstiles
As another application scenario, we picked Helsinki Airport. Finavia relies on a robust security system: EntraQuick gates from Perimeter Protection Group. PPG enhanced the perimeter security around Helsinki airport with folding gates and Full-height turnstiles. On one hand, this was achieved by reducing the number of access points to the secured area. On the other hand, the existing access situation containing sliding gates combined with boom barriers was replaced by a more efficient and secure solution consisting of quick folding gates.

Perimeter Security Solution
Airport perimeter security solutions by Cias are an example for both, indoor and outdoor perimeter security, specialized in microwave and radar sensors. On the inside they can protect entrances, doorways etc. with internal transceiver sensors able to identify perimeter intrusions by using microwaves in small applications, and radar technology sensors. On the perimeter, they can be installed both on preexisting and new structures such as perimeter walls and fences. External security can also be reached by creating imperceptible open spaces through microwave barriers. They produce electromagnetic fields and can be further enhanced with the aid of additional sensors able to detect any kind of perturbing event, activating specific alert signals.

Suppliers
www.axis.com

www.boschbuildingtechnologies.com

www.cias.it/us

www.cld-fencing.com

www.fujifilm.com

www.marstonholdings.co.uk/videalert

www.perimeterprotection.net

www.zaun.co.uk

SECURITY FOR AIRPORTS

Safe Fence, Safe Runway

Securing Airport Perimeters

© vaalaa - stock.adobe.com

Elvis Law, Segment Development Manager, Smart City, APAC at Axis Communications

Perimeter protection has become an important part of security systems, since in recent years to protect large and crowded facilities with enhanced defense became more and more a priority. Among those critical infrastructures' perimeters there were airports, topping the list of all public places for their size and for the large numbers of people moving through daily. GIT SECURITY asked Elvis Law, Segment Development Manager, Smart City, APAC at Axis Communications about the specific requirements for airport security.

GIT SECURITY: What are the challenges associated with airport perimeter protection?

Elvis Law: It's an obvious thing to say, but the expansive nature of airports and the lengthy perimeter means that there are numerous potential points of entry. A high-quality video surveillance system is essential in monitoring the entire perimeter and identifying any attempt at unauthorised entry. The environment can also be relatively hostile, with harsh weather conditions and even wildlife being a potential hazard. The system needs to be durable enough to withstand any conditions and deliver high-quality images in variable light conditions. The air pollution from aircraft engine and dusty environment is significant. The video surveillance system with self-cleaning feature or low dust attachable lens is desirable to maintain a high-quality system performance.

How do new intelligent video surveillance solutions address the perimeter protection challenges of airports?

Elvis Law: The combination of video surveillance cameras and motion detection software has expanded the range and capabilities of perimeter protection solutions from simple detection to complex intrusion analysis. One example is thermal (also referred to as thermographic) cameras, which, when coupled with video analytics software, can protect an area at any time of day, irrespective of the lighting conditions. Sensors using thermal technology are often well suited to airports as they offer excellent detection capabilities required for large estates.

Thermal sensors create an image using infrared radiation emitted by an object, such as a vehicle or a person and can detect

activity, 24 hours a day, 7 days a week, at significant ranges, unaffected by anything but the most severe weather conditions.

When combined with video analytics, modern thermal cameras with sufficient processing power are able to distinguish between the type of intrusion target and alert the operator based on a pre-set list of conditions – this can include direction, speed, person and vehicle. Traditional cameras are also able to do this but are reliant on using visible light, which has inherent and obvious limitations.

Depending on local laws, camera technology can be used to monitor beyond the physical perimeter, providing an additional surveillance buffer and potentially allowing the operator extra time to respond. Solutions harnessing video analytics make it possible to trigger an alarm according to set rules, for example, if a person approaches within 50 metres of the fence, followed by a higher alarm level if that same person breaches a 10-metre zone, or is loitering for a certain time threshold in a specified zone.

With RF Radar integrated with PTZ camera, a second layer of protection over custom defined zone can be enabled with intruders or suspect vehicles path tracking and the corresponding video provided.

What are some of the associated costs with these systems throughout their lifecycles?

Elvis Law: IA Total Cost of Ownership (TCO) calculation takes into account all of the costs of the solution throughout its lifecycle, including: the material and human costs, costs of studies, installation costs of the system, the operating costs, maintenance costs, decommissioning and recycling costs.

Demonstrating a Return on Investment (ROI) of a security solution designed to prevent an incident can be difficult. For an airport, however, where any intrusion is likely to immediately affect operations, the ROI of perimeter protection can quickly become clear. Security personnel can work with their colleagues in the finance department to illustrate the cost of different types of security incidents; be they direct costs due to asset loss or destruction, costs associated with interruption to operations, or more subtle but equally damaging costs associated with reputational damage.

A tangible ROI of airport perimeter protection can also be demonstrated through more efficient use of security resources. A reduction in false alarms and the use of audio and signage to deter potential intruders remotely will create efficiencies, allowing personnel to be redeployed to other tasks such as improving the passenger experience.

CONTACT

Axis Communications
Lund, Sweden
Tel.: +46 46 272 18 00
info@axis.com
www.axis.com

Zenitel Launches Turbine Mini Video Intercom

Zenitel has announced the addition of the new Turbine Mini with Video to its growing portfolio of Turbine intercom and intelligent communication solutions. The new TMIV-1+ intercom from Zenitel provides video surveillance, two-way communications, and remote-entry control, in a low-profile size of 117 x 117 x 43.5 mm; 4.61 x 4.61 x 1.71 inches. It is perfect for use in indoor and outdoor environments, including buildings, universities, K12 schools, hospitals, and more. For video surveillance, the Turbine Mini incorporates first-class video, with HD video up to 1080p resolution and a wide-angle lens that is also NDAA compliant. The Onvif-conformant solution allows operators and users to see each other in all situations. The new TMIV-1+ also incorporates Zenitel's high-definition voice technology, with a 10W speaker and amplifier and active-noise cancelling capabilities. Users can clearly hear and communicate with users even in challenging noise conditions – all thanks to Zenitel's best-in-class audio technology. In addition, the all-weather capability of the TMVI-1+ intercom makes it a perfect solution for all types of indoor and outdoor environments. The solution is UV resistant, and it can be used in rain or sunshine, and in extreme cold and warm weather temperatures. Even more, its low-profile design allows it to blend into an environment, if necessary.   **www.zenitel.com**

Teledyne Flir: RS6780 Long-Range Radiometric Infrared Camera

Teledyne Flir has announced the release of the new Flir RS6780 long-range radiometric infrared camera system, designed for range tracking, target signature, outdoor testing, and science applications in all conditions. Featuring continuous zoom, the camera includes an integrated motorized three-position filter wheel and optional factory calibrations to support thermography applications up to 3000 °C. The optional 3x zoom afocal lens attachment provides engineers and scientists the flexibility to change the focal range from the standard 50 mm – 250 mm to up to 150 mm – 750 mm, designed to get the most pixels on target and address unique application and testing requirements in the field. "The RS6780 enables precision long-range measurement and tracking applications by combining a full-feature, radiometric infrared camera sealed within an IP65-rated enclosure to protect it from the elements," said Desmond Lamont, Global Business Development Manager , Teledyne Flir. "This small-format camera is perfect for open-air testing, thanks to its ability to detect minute temperature differences at long distances, multiple connectivity and software options for easy integration, and a metric zoom lens that optimizes pixel density on target while enabling advanced radiometric measurements, such as radiant intensity. The system also weighs 37 lbs. (16.7 kg) or less for easy deployment and mobility."   **www.teledyne.com**

SECURITY FOR AIRPORTS

Unified Approach

Perimeter Security, an Essential Component of Airport Security

When physical security breaches happen at airports, airlines and their passengers can be seriously impacted. Travel delays, damages to reputation and broken trust for passengers, as well as costly financial losses are just some of the impacts that security incidents can cause.

For example, in the UK, drones entering the airspace of London Gatwick forced the entire airport to shut down, costing the organisation over £1.4 million. On another occasion, flights at London City Airport were disrupted for 6 hours, as nine protesters gained access to the runway and chained themselves together. Similar events cannot be allowed to happen if organisations are to maintain a consistent service to air passengers.

Effective perimeter protection relies on a multi-layered approach that involves a variety of different technologies, including video surveillance, LiDAR, and trip-wire analytics, so that all is not lost should one method fail. It's great if an alarm is triggered if someone should climb the fence, but there should be more layers of security that slow or stop unauthorised people from reaching the door of the terminal building, and/or restricted zones or floors inside.

To ensure that these systems work effectively and do not operate in siloes, it's important to put in place a unified approach to cross qualify incidents and intrusions alerts. With the landscape rapidly evolving due to the introduction of the Internet of Things (IoT) and increased cyber risk, it is even more essential to have a more holistic view of your entire security infrastructure. This article explores the concept of unification in more detail.

Introducing a Unified Security System

An open-architecture, unified security platform provides greater situational awareness for security and operational personnel. With an open architecture security system, disparate systems such as video surveillance, access control, license plate recognition and perimeter intrusion detection systems can be unified under one system, giving a clearer view, and better protection of, the passenger terminal, tarmac and perimeter.

With a unified system, security personnel have the full, uninterrupted view of their site. It allows them to make critical decisions quickly with faster response times and minimise the time lost monitoring and switching between separate systems and devices.

Essential New Technology

Technological innovation is coming to the airport security market all the time and much of it is there to improve intrusion and perimeter protection. Security operators are investing in radar, fence detection sensors, buried cable detection sensors, LiDAR, and even video trip-wire analytics to get as much data as possible to inform their incident response.

But knowing that something is about to breach a perimeter doesn't tell you whether a threat is real or how serious it is. The ability to see who or what is approaching a perimeter helps security personnel make the right decisions on what or if actions need to be taken.

To do this, security personnel need eyes on the ground. Being informed with relevant data from multiple systems will only take you so far. Often, potential threats need to be classified visually before action is taken to identify if immediate action is required. This is essential to avoid wasted time and minimise the blind spots created when operators are away from the control room.

A multi-layered approach is the most effective and cost-efficient solution for protecting an airport perimeter.

David Lenot, Genetec

Effective video surveillance, using high resolution cameras and infrared, can help operators better respond to events. With strategic configuration, the first line of perimeter detection at the fence will prompt alerts that trigger cameras to automatically pan-tilt-zoom into the target area for visual identification and even constantly track a target. Live and playback video surveillance can be displayed at multiple security monitoring centres, or even as a mobile alert to security personnels' smart phones, for immediate verification and response.

Physical Identity and Access Management Systems add another layer to the process by connecting access control to business systems, including human resource directories. This interconnectivity allows organisations to automatically assign or remove access to restricted areas and systems based on corporate policies. As employees leave or change roles within an organisation, their access to sensitive areas can be adjusted to reflect changes in the HR directory, certification status, or other linked systems.

IoT and Cybersecurity

While greater connectivity of devices is revolutionising airport security, it cannot be ignored that IoT enabled devices can become a potential entry point for cyber intrusions. Poorly configured devices, or even devices that are deployed without changing factory pre-set passwords, are a prime target for hackers that want to destabalise your operations or hold your data to ransom.

It is the responsibility of the security operator to ensure that the vendors they buy their devices from can evidence that

they are cybersecure, compliant with current regulations and are constantly being updated with the latest firmware. A unified system will also assist here, as it can provide a clear view of the health of security systems and devices and alert operators ahead of time when hardware is at risk or new firmware becomes available.

Managing a Wealth of Data

With the increase of sensors at the perimeter, airports will consequently have to deal with an increase of data coming in. This can become overwhelming for security personnel, especially when they must actively monitor all the inputs from these sensors to identify specific threats.

A unified security system can enhance best practice by supporting automated alerts and digitised standard operating procedures, providing a step-by-step guide for personnel outlining how to respond to events. This greatly benefits the consistency of response, so that incidents are dealt with the same way, no matter who is on shift at that time, and precedents are set for the future. And by following the set guidelines, threats can be identified, investigated and resolved faster than if decisions had to be remade for every event.

Often, data received from disparate systems is presented to operators in a way that feels like devices are competing with each other. Without that communication, an overwhelming amount of data can make potential security threats difficult to spot. For example, an operator might not be able to connect the dots between a contractor unexpectedly entering a restricted area and a device activating. By using a unified security system, events can be automatically correlated to spot patterns, giving a

greater chance of accurately identifying threats that are real and require further investigation.

The ability to combine event data is also important for ensuring perimeter security. Operators must be presented with current events as they occur in order to make informed decisions based on threat levels. A unified security system provides greater situational awareness for operators by giving them the ability to create reports and alerts using information from all sources on the platform. This is critical as it allows an emerging situation to be seen from all parts of the system as a single event rather than a series of separate incidents.

Closing Thought

A multi-layered approach is the most effective and cost-efficient solution for protecting an airport perimeter. Extending security beyond the fence line and preparing multiple levels of protection from intruders is essential to keeping air travel safe and trustworthy. By selecting a unified system that can incorporate a wide variety of technologies, you can better secure your facilities today and in the future.

The Author
David Lenot,
Critical Infrastructure
practice lead at Genetec

CONTACT

Genetec Europe
Paris, France
Tel.: +33 1 4469 5900
www.genetec.com
www.genetec.com/industries/airports

PERIMETER PROTECTION

GIT System Test Video Analytics

Independent and Fair Testing of Video Analytics System for Perimeter Detection

Perimeter protection is essential for securing premises and critical infrastructures. Video analytics can greatly improve security in such environments while lowering costs at the same time. Security personnel and operators want to be alerted instantly when suspicious events are detected but not distracted by false alarms. No matter what technology is used, there is only one way to determine if a system is delivering the protection that is needed: A comprehensive test, in a real-world environment, executed by experienced professionals.

While there are numerous tests and reviews available for a variety of consumer products, not a lot of data is available for professional security products and systems. When it comes to choosing security products and systems for projects, end-users, security installers and system integrators very often have to rely on their experience with certain vendors in the past, recommendations from others, or the information that the vendors provide. Success stories and articles about installations are a valuable tool to gather information and may influence a buying decision, but they have their limitations. As a result, we were often asked if we could provide more in-depth information about systems or if we could test products and systems and then share the information.

GIT SECURITY and GIT SICHERHEIT Partner with SMP
We were very open to the idea when we were approached by SMP (Sachverständigenbüro Markus Piendl) to work together on independent testing for security systems. We decided to partner with them as they are very experienced and have often worked with end-users, insurance companies, and system integrators on perimeter protection projects.

Markus Piendl from SMP is a Munich-based expert for security technology, prevention and perimeter security. He is a recognized specialist in Germany and abroad for reports in the security industry

and is a manufacturer-independent expert with proven experience in more than 1900 projects. His colleague, Ing. Hannes Dobler, Msc, is based in Vienna, Austria, and is a judicially certified expert with extensive experience in military technology and security projects. Wiley and SMP partnered with i-Alarmsysteme as a technical service provider at the test site for the GIT System Test Video Analytics.

Once the concept of the test was finalized, we approached vendors active in video analytics for perimeter protection and asked them to join the test. Avigilon, Axis, Bosch, Dahua, Dallmeier, Hikvision, Honeywell, Mobotix and Saimos/Vivotek/ Milestone joined us for the first series of tests.

Ready for Testing
With just a few days to go before the tests began, we had the opportunity to talk to our partners about the progress we made and the upcoming tests.

GIT SECURITY: Mr. Dopler, you presented two test sites within only a few days of our first inquiry. Why did you choose these sites?

Hannes Dopler: First of all, the proximity to a European capital was important to us with regard to logistical issues. For practical reasons, we wanted to ensure that a reliable, competent technical service provider was located in the immediate vicinity. Furthermore, it seemed reasonable to

us to have two test sites: A short distance one with a distance of 120 meters on which the focus will be; and a long distance one with a distance of 300 meters, which can be evaluated from the same container.

Mr. Zehetner, you are the managing director of i-Alarmsysteme GmbH. What did you think when Mr. Dopler and Mr. Piendl asked you to be the technical service provider for our test?

Peter Zehetner: I have been in the security industry for more than 30 years now. The approach of a comparative test with equal conditions for each manufacturer appealed to me very much for a variety of reasons. Vendors that we already know very well will have the opportunity to prove their capabilities. Vendors we don't currently work with would be able to show where their strengths lie. There is no better training and development opportunity for my technicians, but also for the sales department. I immediately agreed and got my team excited about the joint test.

Mr. Dopler, how did you and your colleague, Mr. Piendl, describe this test in detail to the manufacturers?

Hannes Dopler: We wrote a 30-page document in German and English in which we presented the requirements, measures and the process in detail. Some vendors also asked for an online conference to ask questions about installation, logistics and test

F.l.t.r: Peter Zehetner, Kathrin Karner, Gert Hammer and Luciano Terziu from i-Alarmsysteme after the installation of the video systems

Eleven Camera Systems will be thoroughly tested within the next weeks. The test scenarios are based on known test requirements, test procedures and guidelines. The test criteria recreate the range of different offender groups that could be targeted for critical infrastructure as well as system-relevant terrain sections or sophisticated security installations.

scenarios. We were particularly pleased to work on refining over 500 realistic test scenarios that we will run in order to test the performance of the systems.

Kathrin Karner, MA, your responsibilities for the i-Alarmsysteme included communications and coordination. What challenges did you face and how did you overcome them?

Kathrin Karner: I received requests from all parts of the world. Some manufacturers asked us to set up their cameras and digital image storage for them because the Corona virus restricted entry. Other manufacturers came to us themselves to prepare their systems; that was a matter of coordination. Packages from manufacturers arrived almost daily. Their content had to be checked, the setup was coordinated by me, and we held online conferences to clarify technical questions. Communication and coordination with the manufacturers, my colleagues from the technical department, Wiley and the two experts from SMP were my priority. My top priority was to ensure that the hardware could be installed on both test sites as quickly as possible and that no request, no matter how small or large, on any subject was left unanswered. A time consuming, challenging and stressful job - especially in the last days before the different systems were disconnected from the internet to be checked for unwanted and false alarms.

Gert Hammer, you and your colleague Luciano Terziu provided the extensive technical infrastructure for our test in record time. How elaborate was that?

Gert Hammer: We were dealing with eleven different systems, all of which work differently. Some manufacturers we knew. Video analysis for the perimeter is a special topic for which we as technicians needed time to familiarize ourselves. The fact that the manufacturers helped with online training, configurations via the Internet or on-site was a great advantage. Rarely have I had the opportunity to learn so much in a short period of time.
Luciano Terziu: For me, it was important to keep to the tightly planned schedule and to offer all vendors the same starting conditions. A container with enough space for eleven workstations had to be sourced, extensive cabling, power supply and dedicated network had to be secured, lightning and surge protection was installed, a temporary mechanical fencing system was erected, powerful infrared floodlights arrived from the UK and were installed. This all happened alongside our demanding day-to-day business and was only possible through a team effort.

So much for a report on the concept and preparation of our joint test. We will report exclusively on the results in a special section of our June 2022 issue. It's definitely something to look forward to.

PERIMETER PROTECTION

Detect.Track.Classify.

Transitioning Command and Control Platforms to New Autonomy C4ISR Systems

Until recently creating a new enterprise C4ISR system, be it Army, Navy, Air Force, or Department of Homeland Security, utilized the same deterministic systems engineering approach. In the last several years the use of AI and Machine Learning (ML) in surveillance systems has become widespread, often with good success, but sometimes with mixed results. As we have observed in recorded surveillance photos and videos, adversarial methods and techniques are sometimes able to defeat the standard AI/ML trained neural networks for example by altering target shapes or adding layers of clothing to humans to become low observables.

It is no surprise that to address the standard "Detect-Track-Classify" problem a more sophisticated approach extending beyond AI/ML is imperative. The current DoD Digital Modernization Strategy guidelines are embedded in PureTech Systems PureActiv software base architecture as well as in individual security designs that we have used successfully in the US and internationally. Working with DOD JAIC (Joint Artificial Intelligence Center [https://www.ai.mil/about.html]) since 2016 provided us an early understanding of many of these guidelines and techniques. One of JAIC early recommendations was to not only put bounding boxes around detected objects, but also record relevant metadata to deliver more information for the mission and later trend analysis. We were able to implement and test these recommendations at field installations, continually refining the software algorithms including taking advantage of sensor correlation.

Lessons Learned

By leveraging such sensor and data correlation, PureActiv C4ISR hosted on edge devices and/or servers can receive detections and tracks from multiple sensors such as motion analytics, radars, and fence, ground and subterranean sensors and then autonomously command PTZ cameras and/or dispatch UASs, and UGVs to go "inspect" the detected targets to automatically confirm target types BEFORE issuing alarms, i.e. provide auto-verification. This robust approach also combines our geospatial video analytics with AI/DL and radar tracks to disambiguate the objects of interest. This allows the system to eliminate a substantial, up to 95%, amount of nuisance alarms while maintaining a very high detection rate.

Another important lesson that we take to heart is the AI-assurance. It's important to remind ourselves that AI can do wrong things and it can learn wrong things. That is why at PureTech Systems we continuously validate the confidence level of the system through robust and continuous ground truth regression testing.

© Gundolf Renze - stock.adobe.com

The general view and key features of an autonomous C4ISR

In this example screenshot, objects of interest are automatically detected, tracked (upper left and lower left side of the screen) and classified by AI/DL as people, conveyance, and UAV and displayed on the digital terrain map with the correct GIS coordinates in real time (upper right side). Alarms are displayed in the lower right with a still image and looping video of the alarm and the pertinent live camera. The decision of target classification is made autonomously without human interaction.

In addition to gradual improvement in sensors' performances, such as cameras and radars ranges and sensitivities, PureTech recently integrated three relatively new capabilities and made them available to DHS and CBP in particular. These included Android Team Awareness Kit (ATAK), small drones (sUAS) detection, and counter-UAS systems. The same C4ISR package shown above fully supports autonomous counter UAS operations after a combination of the air surveillance radars and high-speed, wideband RF scanner for detection and classification of signals in congested spectrum environments were integrated. Since adversaries use sUAS for smuggling illegal drugs over the border, an integrated counter-UAS capability available where such activity is occurring is badly needed.

In addition, C4ISR systems that provide ground and UAS tracking including recording track metadata can server as a tool to learn about smuggling corridors and patterns of drug cartels' operations. According to Tim Bennett the program manager for air domain awareness at the Department of Homeland Security's Science and Technology Directorate whose job is devoted to detecting, tracking, and countering drones, "Narcodrones a new big problem that we all have to address. It isn't just DHS. It's across all agencies in our government and all governments in the world (https://www.smithsonianmag.com/air-space-magazine/narcodrones-180974934/)."
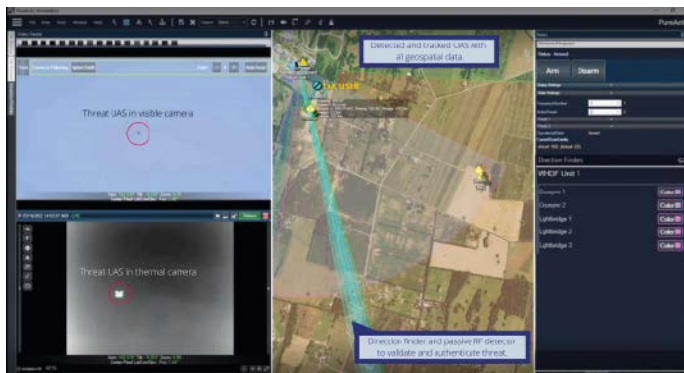
Small UAS Detection, Tracking and Classification

ATAK is quickly becoming a force multiplier for many agencies by enabling cross collaboration between individual agents, teams, and central command. ATAK becomes an extension of the autonomous command and control by communicating data from and to the field including geolocations, media, and tactical information that is immediately actionable and disseminated across one or more areas of responsibility. All information that is available at the C4ISR level (left picture below) can be displayed on ATAK devices (right picture), whether it is installed on a Windows laptops or Android devices.
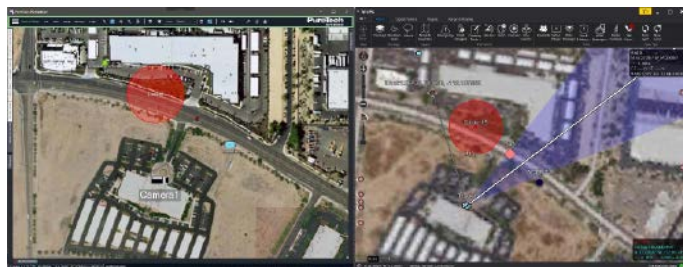
Android Team Awareness Kit (ATAK)

In conclusion, it is worth noting that in every C4ISR autonomous subsystem and operation is designed to aide, not replace human capabilities. Whether used as a battlefield command and control or border security common operational picture, one of the key goals is to augment the warfighter's or law enforcement agent's reasoning skills with an autonomous decision-making systems. Ultimately autonomy reduces cognitive load by filtering nuisance alarms and prioritizing information flow for action. This enables agencies to dramatically reduce operational resources while maintaining mission effectiveness. As former Secretary of the Air Force Heather Wilson once said, "The advantage will go to those who create the best technologies and who integrate and field them in creative operational ways that provide military advantages. (www.acc.af.mil/News/Article-Display/Article/1448216/secaf-this-is-about-lethality-and-mission-effectiveness/)"

The Author
Ilia Rosenberg,
PureTech Systems,
Vice President, Federal Sector

CONTACT

PureTech Systems
Phoenix, AZ, USA
Tel.: +1 602-424-9842
info@puretechsystems.com
www.puretechsystems.com

Security for Critical Infrastructure

4x3

1. **What approach and solutions do you recommend to secure critical infrastructure?**

2. **What are the biggest challenges in this field and how do you handle them?**

3. **Please describe a success case where you implemented your system to secure critical infrastructure?**

Dennis Johe
Deputy Head of Business Development & Presales Management PEU at Assa Abloy Sicherheitstechnik GmbH

www.assaabloy.com

1. Building and IT security are particularly important topics for operators of critical infrastructures (KRITIS). Both cyber and physical attacks are on the rise and the law requires those responsible to continuously increase the overall level of security in KRITIS facilities. Operators should therefore rely on a holistic security concept in their institutions that takes IT security and data protection into account, as well as physical security. Electronic locking systems offer a high degree of protection against tampering and intelligent attacks, for example. They combine the best of two worlds: mechanical locking system and digital access control.

2. The compulsory introduction of an attack detection system by May 2023 alone poses major challenges for many KRITIS operators. In 2021, ASSA ABLOY therefore introduced and certified the information security management system in accordance with DIN EN ISO 27001:2017 for the scope "Development and sales as well as operation and maintenance of products and services for mechanical and electromechanical locking systems".

This is a win-win situation for us and our customers because the certification makes it clear immediately that information security is already taken into account during the development of our products and that production takes place according to the latest international security standards.

3. The energy group E.ON SE relies on our high-quality and decentralised eCLIQ locking system. Thanks to its flexible structure, digital programming and management, eCLIQ effortlessly adapts to the constant changes caused by digitalisation and the energy revolution. At the same time, the system meets the high security requirements of the group both mechanically and electronically. These include, for example, the blocking of keys, logging of locking events or time and location-based access restrictions depending on the user's role and profile. Another important aspect for E.ON was the large variety of cylinder types, which not only integrate doors, but also lockers or switchable locks in machines and vehicles into the system.

Neil Foster
Project Development Manager at Optex Europe

www.optex-europe.com

1. Protecting critical infrastructure is a significant challenge, not least because of the potentially devastating impact a breach or intrusion could have on wider society. Due to the large and complex nature of these sites, combining technologies and systems to create a multi-layered approach to security, that considers the approach, perimeter, access points and assets, is needed to provide early and highly accurate detection. Understanding the operational requirements and environment of each individual site and knowing which areas need protecting the most (i.e which are the most vulnerable and present the greatest risk) is crucial to determine the best solution for that site.

2. Critical infrastructure sites are usually larges premises, often located in remote areas that are submitted to harsh and sometimes hazardous conditions. Effective perimeter protection requires sensing technologies that won't be affected by other equipment onsite or by the natural elements such as wind, rain, vegetation or wildlife. The choice of technologies will also be determined by the scale of the site. Fibre optic sensors and LiDAR technology, for example, can be used to create multiple

detection zones within a perimeter and adjust the sensitivity within each zone. Point detection, too, is one of the latest sensing technology advances, enabling the exact location of an intrusion to be pinpointed, which enables a faster response and verification process.

3. Optex has a proven track record when it comes to protecting critical infrastructure. For example, for nuclear power plants their environment presents a challenge due to high winds and fog created by the sea mist, so we combine different technologies – including Rewall long-range PIRs to protect between the inner and outer fence, fibre optic sensors to detect anyone attempting to go over, under or cut through the fence and Redscan LiDAR sensors to create an additional layer of perimeter protection with virtual walls - delivering highly reliable detection across the entire site. A similar multi-layered approach has been deployed to protect data centres and prevent any potential weak point in any single technology been exploited, which is one of the key benefits of working with Optex as we can provide multiple sensing technologies.

---

1. With growing perimeter security threats, the need for multi-layered perimeter protection has increased. A combination of different sensors and technologies should be relied upon to protect the boundary, which should comprise the holistic site and property perimeter, the building facade perimeter, and the internal perimeter. This forms a layered approach that helps delay, deter, and detect intrusion.

In isolation, any one sensor will have its limitations. But by combining them it is possible to build a resilient system that is difficult to defeat. That's why, we recommend deploying a unified physical security platform. A unified system is specifically designed to manage multiple security devices in one platform, thereby providing both a unified interface and back-end server infrastructure that offers fluid version upgrades. Unification also allows security personnel, to streamline workflows within a single platform that syncs all security system management capabilities, such as monitoring, reporting, alarm management, authentication, permissions and more.

2. Cybersecurity – Geopolitical tensions are high and cyber-attacks are increasing in frequency and severity. By the end of this year, the expected cost of cybercrime globally is 6 trillion dollars, and this figure is expected to go as high as 10.5 trillion dollars in 2025.

IoT devices such as IP surveillance cameras have become a top target for cyber criminals because of their high computing power and good internet traffic throughput.It is therefore essential organisations

select vendors they can trust and whose solutions are designed from the ground up with cybersecurity and privacy in mind.

Rise of drones – Risks to critical infrastructure are growing as criminals increasingly adopt drones as an attack vehicle. Many organisations are deploying detection and countermeasure technologies to combat the threat, but this can create added complexity, if they fail to communicate with the rest of their security structure. The real value of unified systems is that they do all the heavy lifting and steer the operator through every step until an incident is resolved.

3. Faced with increasing security concerns - a leading US electricity distribution company– knew that it needed an integrated security solution to increase perimeter security and boost operational efficiency. A specific issue with its existing solution were false alarms caused by animals stepping over the fence line. Security personnel had to manually verify each of these incidents, leading to frustration and lost time.

Genetec solutions were deployed to unify its many different security systems within a single platform. The process of unification dramatically changed how its operators understood their landscape. With a unified system like Security Center in place, operators are able to cross-qualify intrusion alerts by quickly pinpointing cameras nearby in the mapping module to get a broader view of the situation and confirmed location. This allows them to efficiently verify whether or not they are dealing with a false alarm.

David Lenot
Critical Infrastructure practice lead at Genetec
www.genetec.com

---

1. The initial step in securing any critical infrastructure starts with a threat and vulnerability (i.e. risk) assessment. The objective is to identify potential vulnerabilities, assess the magnitude of negative consequences that could result should the threat be realized, and recommend ways to reduce or mitigate the vulnerability. Of course, there are both physical and cyber risks that need to be assessed and mitigated. When designing systems to secure the physical perimeter around critical infrastructure, one must assess the means of access control, ingress/egress procedures, physical barriers, and electronic intrusion detection systems. The optimal (efficient and effective) solutions can come about as a result of this assessment process. No single solution fits every scenario.

2. Our approach focuses on providing intrusion deterrence and detection around any critical infrastructure and real-time situational awareness to aid security personnel in their response. When it comes to physical intrusion detection, the first challenge is to ensure the proper system design that provides needed detection coverage and adequate response time. Proper detection sensors (e.g. thermal cameras, radar, lidar, and/or fiber optic cable) are selected and can be combined as needed to provide the necessary probability of detection. Another challenge is to ensure the technology selected generates minimal nuisance alarms while maintaining a very high probability of detection. If the system is overwhelmed with nuisance alarms, security personnel

end up simply ignoring the system. And should a real alarm occur, it will either be ignored or buried in nuisance alarms and missed. Providing automated detection and autonomous response is critical so security personnel are not required to watch the monitoring system 24/7. Rather, the systems can alert them when something of concern occurs and even take automated actions such as invoking deterrence or locking down a facility. This means the systems must have a near-zero nuisance alarm rate. PureTech's Deep Learning technology "Auto-Verifies" the initial detections from any intrusion sensor and classifies them as either real or nuisance events giving security personnel high confidence that any alarm is likely from a real intrusion. We like to say our software removes the hay (nuisance alarms) so that only the needle (real alarm) remains.

3. In our 17-year history, PureTech has numerous success cases where our geospatial Deep Learning boosted video analytics and Common Operating Picture User Interface have been used to secure small and large perimeters. We have a very diverse set of capabilities and installations for both ground and airborne intrusions. Our use cases range from detecting access control violations, such as tailgating through gates or turnstiles, to providing a full layered solution with triple redundant detection for the most critical of facilities. In other scenarios, our systems enable very long-range detection out 5 or more miles and situational awareness through our C4ISR user interface for border protection.

Larry Bowe
Jr. President and CEO, PureTech Systems
www.puretechsystems.com

PERIMETER PROTECTION

Integrate and Communicate

The Integration of Sensors into Third-party Systems Brings Operational Benefits and Convenience

Ksenia was the first company to take advantage of the two-way communication capabilities provided by many of the Optex outdoor detectors, in order to create an early detection system. A few months after receiving the GIT Security Award for its innovative contribution to the industry, two-way integration was first presented live at the Ksenia booth at the Security trade fair.

GIT SECURITY Asked the Marketing and Sales Director of Ksenia, Giorgio Finaurini, about this Cooperation.

GIT SECURITY: Mr. Finaurini, your Company has recently integrated Optex sensors into your Ksenia systems. Why did you choose Optex as a partner?

Giorgio Finaurini: For us at Ksenia Security this is an important collaboration that we intend to continue to cultivate with great enthusiasm. External sensors are an essential part of any good security system that allows you to ward off a potential intruder before they gain access to the property and its premises. We have known of the excellent performance of Optex detectors for many years, especially in difficult environments such as outdoors. We have implemented the integration between our 'matrix' (both in the wired BUS and radio version) and various sensors of the product family with the aim of further expanding the opportunities in the security field, and making the management of these sensors flexible, also remotely.

What are the advantages from the end user's point of view?

Giorgio Finaurini: Integration with Ksenia allows end users to take advantage of the advanced technology of Optex outdoor detectors which, thanks to digital analysis, are able to distinguish authentic alarms from the main causes of false alarms, such as small animals or environmental changes. The main advantage of bidirectional integration is that the detector settings can be changed remotely by the user depending on the situation and environment, for example, by adjusting the sensitivity of the sensor or changing the battery saving mode.

Ksenia has implemented two interfaces that integrate perfectly with Optex wireless sensors from the BXS, VXS, WXI, WXS, and QXI series, allowing complete remote management via either the Ksenia SecureWeb cloud or the free Ksenia Pro App. The two devices are called 'matrix' and 'matrix Bus', and differ in the way they are used to communicate with the control panel. matrix is via radio and matrix Bus is a wired expansion module that enables the sensors to be connected to the Ksenia Bus.

Local or Remote Power

Matrix is the bidirectional universal radio interface to connect third-party, low power consumption motion detectors to the Ksenia lares 4.0 platform in the 868 MHz frequency band, allowing their remote management. matrix directly feeds the connected motion detector from its own standard CR 123A batteries, from one to three cells, depending on the consumption of the connected motion detector.

Matrix BUS is a wired expansion board that gives the opportunity to add one zone to the control panel and allows Optex sensors to be connected to the Ksenia Bus. It is then possible to carry out the configuration remotely through Ksenia SecureWeb, or via Ksenia Pro App. matrix Bus is ultra-compact and does not require any battery because it is powered by the KS-Bus.

© Jacob Lund - stock.adobe.com

SPECIAL FOCUS

Access Control 2022

An Unrestricted Look at the Latest Methods of People and Vehicle Access Control

SPECIAL FOCUS

If you use electronic access control for your office, factory, outlying infrastructure or even your home, then you already belong to an ever-growing market that is predicted to grow even more in the coming years. Many current electronic security market studies confirm that the Asia Pacific region in particular is set for significant expansion of 5 – 9 % annually. It is not just anxiety over insecure premises that is driving this growth, but also the ready availability, simplicity and efficiency of the technology that is now on the market. GIT SECURITY has taken a snapshot of just some of the solutions that are leading the way.

From simple and cheap to complex and costly, any access control system will have been configured according to the level of risk for that particular property. A regular, scheduled review to see if the risks have changed is of course inked into the calendar … isn't it? But unexpected geopolitical events can rapidly change the situation before the review has recognized a need to upgrade security, as we are currently seeing in Europe. So the flexibility and security that was specified and originally designed into the system before it was installed will prove its worth if changes can be made at short notice.

Upgrade or Fail

If your current method of person identification is a low-frequency or even a magnetic stripe card without any encryption, then spoofing or cloning of those cards is quite simple to do these days, and you cannot consider your access control secure. This

Idemia partners with Shoden and Genetec in its first deployment of facial recognition for access control in Japan

type of card is surprisingly still in frequent use, sometimes as a legacy part of a larger security system, but nowadays it presents a major weakness. Biting the bullet to discontinue its use and to upgrade to a more secure solution will – maybe after some

short-term complaining from users – be rewarded by much improved security and better sleep at night. The arguments for spending money on the upgrade are almost certainly easier to find than explaining why a security breach was so easy to carry out. The high-security RFID cards from Salto Systems, for example, can incorporate a number of functions, not just access control, to blend into a company's legacy internal systems and tighten up security. Their range includes locks, padlocks and cylinders for almost any type of door.

The Human Touch

When buying a property, a well-known piece of advice is 'Location, location, location'. When specifying an access control system, this could be 'Verification, verification, verification'. Yes, an RFID card of whatever security level can be cloned with special equipment and knowledge, but then who is actually carrying it? Two-stage veri-

The city of The Hague opted for Moov City Access by Nedap to support the municipality in regulating vehicle flows in its city center

Tymetal specializes in providing custom security gates to fit the varied security needs of airports

fication should be able to identify a unique person, maybe by confirming a biometric element such as their face, fingerprint, retina or vein pattern – something 'they are'. So a unique access token in whatever form – something 'they have' – is backed up by unique identification of the person presenting it. The Swiss company TBS Biometric Systems have a mature range of both touch and touchless fingerprint readers as well as face detection and iris scanners. You will find some of their products already integrated into the solutions of major security system manufacturers. Bayometric from San Jose, California has a wide range of products, including some multifactor authentication and FBI-approved models. A Japanese solution from Idemia called VisionPass has been integrated into Genetec's Security Center as part of a comprehensive security solution for a large utility company. It will provide rapid and contactless access control using a combination of 2D, 3D and

infrared cameras with a stereoscopic image processing algorithm. Canadian firm Axis Systems provides complete security packages that can include biometric checking by fingerprint, hand print or retina scans, facial recognition, voice recognition, or in-motion identification analytics. Contactless is not only quicker and easier, but far more hygienic – a decisive factor in the light of the pandemic of the last two years.

Beep, beep
A beep on the horn and a friendly wave to the man who pushed up a red and white pole was a wonderful way of starting the day, and absolutely sufficient to prevent just anyone from using the company parking lot. When entering a secure site however, vehicle access control these days must not only consider the identity of each physical vehicle but also that of the driver and passengers. Nedap have been supplying tailored solutions for many years and are moving with the trends and developments in vehicle access control. Apart from their RFID and ANPR products, they also offer UHF vehicle solutions that require two credentials in order to be valid, one for the vehicle and one for the person. Long-range UHF readers from Stid have a reach of up to 13 meters, ensuring fluid traffic movement at site entrances. Used in conjunction with an intuitive mobile ID check via a smart phone, the level of security is increased once again – and is a convenient method of access control for motorcyclists too.

If someone is going to enter a site with malicious intent by simply driving through any checkpoint, then the products from Tymetal of Greenwich, NY USA can ensure that they don't get far. An impressive range of crash beams, bollards, fences, gates and even crash-rated flower planters all help to keep vehicles driven by people with hostile intentions out of a protected compound. This could be an airport, a bank's premises, where critical infrastructure is installed or to protect public buildings. Tescon from Salzgitter in Germany manufacture barriers of all shapes and sizes and install them worldwide to prevent unauthorized access by both people and vehicles. Their range includes bollards and barriers as well as tire-killers and, for those on foot, turnstiles with 90° or 120° separation for internal and external installation that can be easily connected to existing access control systems.

Getting Cloudy?
Security as a service (SaaS) is fast becoming the way to manage your access control environment. Yes, you can tie a member of your team down to do the day-to-day management of entering names and details into the system or modifying or deleting them.

And yes, you can delegate the upgrading of firmware and software to someone else. The convenient solution however is to offload the boring administrative tasks to a service company, one that ensures the validity, security and legality of the data that is used. Protection against cyber threats will be part of the package as well as multi-factor verification of users. This workload is likely to increase with time rather than reduce, so 'getting cloudy' is looking more like the sunny way forward. Gartner, the study and report publishers, have put out a very useful hit list of identity management trends to heed in 2022, while Saviynt have published their top ten identity security trends too. Both include SaaS as a growing trend.

The palette of security solutions available from Honeywell commercial security includes the Maxpro Cloud which, as its name suggests, is a cloud-based security management system that provides real-time access control and video surveillance to any authorized mobile device. The exos 9300 system from Dormakaba is modular and can be compiled according to needs, both current and future while the jay cloud element integrates the management of your access control system into SAP. Their exivo solution can manage a company's entire access control system via a web-based platform and provides full control of all access rights – for every room and every individual.

The trends are clear, so a fresh look at your access security as it stands now might reveal the need for one or more of the products mentioned above.

Suppliers

Axis Communications | www.axis.com

Axis Systems Group | axissystemsgroup.com

Bayometric | www.bayometric.com

Dormakaba | www.dormakaba.com

Gartner | www.gartner.com

Honeywell | www.honeywell.com
(search for Maxpro Cloud)

Idemia | www.idemia.com

Nedap | www.nedapidentification.com

Salto Systems | www.saltosystems.com

Saviynt | www.saviynt.com

Stid | www.stid-security.com

TBS Biometrics | www.tbs-biometrics.com

Tescon | www.tescon-security.de

Tymetal | www.tymetal.com

The Varso Place development in Warsaw, Poland comprises prestigious office and public spaces on ground levels, including shops, restaurants and an observation deck on the Varso Tower

ACCESS CONTROL

High and Mighty

The Tallest Building in the EU Uses Mobile Access

HID Global, a worldwide provider of trusted identity solutions, has implemented its Mobile Access solution and mobile-enabled readers in Varso Place, the site of the tallest skyscraper in the European Union, which allows more than 7,000 people to move more freely and securely throughout the building.

Located in Warsaw, Poland, Varso Place is HB Reavis' latest development and most ambitious project to date. Designed by world famous British architects, Fosters + Partners, it comprises three buildings in a 144,000 square meter area. The project's showstopper is the fully glazed 53-storey Varso Tower standing at over 310 meters tall. The mixed-use site features prestigious office and public spaces on ground levels, including shops, restaurants and an observation deck at the top of Varso Tower.

Due to the size and scope of the project, HB Reavis - a renowned international workspace developer - sought a single access system for the entire building so that every tenant would have a simple, easy-to-use, one-stop solution for security management. It wanted to move away from tenants having to use a traditional key fob or card-based solution and rather implement a high-tech system that also allows for the management of digital credentials using smartphones as a primary form factor.

Multi-Service

The solution they chose included HID Mobile Access and mobile-enabled readers that are equipped with Bluetooth Low Energy (BLE) and Near Field Communication (NFC) technologies, as well as a Software Development Kit (SDK) that integrates with HB Reavis' More App. The app covers all building services from concierge services, events, room booking systems, car or bike sharing and, of course, easy access when people enter and exit and move around.

Seamless Access

As the SDK can be developed and upgraded over time as requirements change, HB Reavis is able to maximize the long-term benefit of mobile security. The mobile, contactless solution – which supports Android and iOS-based smartphones – has been particularly beneficial during the COVID-19 pandemic as it minimizes surface contact and the human-to-human

interaction that is typical when issuing and managing physical cards and key fobs.

"Not only does mobile access provide state-of-the-art security control, there is no need to remember to take a pass with you when you leave home or move around the building. When security is based on the phone, it is frictionless because people always have their phones with them," said Jakub Kacer, Security Manager at HB Reavis. With the support of HID Global, HB Reavis can ensure a seamless access control solution that enhances the user experience for tenants and employees at Varso Place who access the building's facilities every day.

CONTACT

HID Global
getHID@HIDGlobal.com
www.hidglobal.com

Reader Certification

OSDP-certified Access Control Readers

STid's Architect Blue series of access control readers has been certified to meet the Security Industry Association (SIA) Open Supervised Device Protocol (OSDP) standard for access control security. SIA OSDP Verified is a comprehensive third-party testing program to ensure that products meet the stringent global standard established by the International Electrotechnical Commission (IEC).

STid offers a wide range of OSDP-certified access control readers

STid Group, a leading manufacturer of contactless high security devices, has a wide range of OSDP-certified and multi-technology RFID, NFC and Bluetooth readers that can be equipped with a biometric fingerprint sensor for enhanced security. The Architect Blue is the industry's first OSDP-certified biometric reader. It combines strong 1:1 authentication with fingerprint, card and Bluetooth smartphone technologies. Additionally, STid offers the first OSDP-certified touchscreen readers with a scramble pad function. Architect Blue is one of the only readers to support OSDP file transfer to update a system's access control readers remotely; time-consuming configuration of individual readers on location with configuration cards is not necessary. Virtual or RFID configuration cards are also available.

"Utilizing the established SIA OSDP North American standard is important for clients requiring higher security, such as for government applications, since it meets federal access control requirements like PKI or FICAM," says Maé Tholoniat, STid product manager. "Our Architect readers have immense flexibility for virtually any use case and now they offer maximum interoperability with other OSDP-certified controllers or peripherals."

Flexible, Scalable, Modular
The readers are designed to operate with the STid Mobile ID application, free in the Apple Store or Google Play, which turns smartphones into virtual cards, providing user-friendly and instinctive identification modes. The series includes seven interchangeable modules that can be connected easily to a smart RFID and Bluetooth core. They come in a variety of form factors (mullion, gang box) and with a variety of features (card reader, keypad, touchscreen, biometrics, QR Code, 125 kHz) for optimal performance in a wide variety of client applications. All functionality and security levels can be easily upgraded. With a patented tamper protection system, Architect Blue readers protect sensitive data and enable easy deletion of authentication keys, when necessary. They have been designed to withstand harsh environments and high impacts, and to operate properly outside.

"We strive to ensure future-proof and open technology for our customers. OSDP certification for our entire series is an important milestone to continue offering high-security access control solutions," said Frederick Trujillo, U.S. operations manager, STid. "We have designed our readers and mobile ID to operate worldwide with any

other open solutions an integrator or end-user may currently be using or consider in the future."

Interoperable and Open Technology-based Solutions
STid develops its solutions on standardized open technology such as MIFARE DES-Fire EV2 and EV3 and public encryption algorithms. This gives organizations the freedom to choose what suits them best. The company relies on the quality of its products and their excellent security to win client loyalty rather than any proprietary technology. In addition to being fully compliant with the OSDP open-source protocol, STid's readers also support the European SSCP communication standard, powered by S.P.A.C., which provides end-to-end security between physical and logical access control equipment.

CONTACT

STid
Greasque, France
Tel.: +33 442 126 060
www.stid-security.com

FACILITY SECURITY

VIDEO TECHNOLOGY

SECURITY MANAGEMENT

Facility Security

deister electronic

deister electronic GmbH
Hermann-Bahlsen-Str. 11
D-30890 Barsinghausen
Tel. +49(0)5105/516-01 · Fax +49(0)5105/516-217
info.de@deister.com · www.deister.com
access control; vehicle identification;
biometric verification; guard tour systems;
storing and management of keys and valuables

Video Technology

AUS GUTEM GRUND
GRUNDIG

Abetechs GmbH (Grundig Security)
Steinhof 39 · D-40699 Erkrath/Germany
Tel: +49 211 5380 6832
info@grundig-security.com · www.grundig-security.com
The impressive new GRUNDIG Security IP range
covers everything required in modern, professional
video surveillance applications.

Security Management

deister electronic

deister electronic GmbH
Hermann-Bahlsen-Str. 11
D-30890 Barsinghausen
Tel. +49(0)5105/516-01 · Fax +49(0)5105/516-217
info.de@deister.com · www.deister.com
access control; vehicle identification;
biometric verification; guard tour systems;
storing and management of keys and valuables

Facility Security

DICTATOR

Dictator Technik GmbH
Gutenbergstr. 9 · D-86356 Neusäß
Tel. +49(0)821/24673-0 · Fax +49(0)821/24673-90
info@dictator.de · www.dictator.de
Drive units, hold open systems and smoke detectors,
door control solutions

Video Technology

Dallmeier

Dallmeier electronic GmbH & Co. KG
Bahnhofstrasse 16 · 93047 Regensburg
Tel. +49(0)941/8700-0 · Fax +49(0)941/8700-180
info@dallmeier.com · www.dallmeier.com
Video security technology made in Germany:
multifocal sensor technology Panomera®,
IP cameras, recording servers, intelligent video
analysis, video management software

Security Management

funkwerk video systeme

Funkwerk video systeme GmbH
Thomas-Mann-Str. 50 · D-90471 Nürnberg
Tel. +49(0)911/75884-0
Fax +49(0)911/75884-100
info@funkwerk-vs.com · www.funkwerk.com
CCTV, system solution, system integration,
video monitoring security, building management

Facility Security

SimonsVoss technologies

SimonsVoss Technologies GmbH
Feringastr. 4 · D-85774 Unterföhring
Tel. +49(0)89/99228-180 · Fax +49(0)89/99228-222
marketing-simonsvoss@allegion.com
www.simons-voss.de
Digital locking and access control, intelligent locking com-
ponents with the latest software. System 3060 plants fulfill
highly complex requirements in large buildings. They are sim-
ply and quickly expandable and work consistently wireless.

Video Technology

EIZO

EIZO Europe GmbH
Belgrader Straße 2 · 41069 Mönchengladbach
Tel.: +49 2161 8210 0
info@eizo.de · www.eizo.de
Professional monitors for video surveillance with
visibility enhancement technology and 24/7 use,
IP decoding solutions to connect IP cameras
without any computer.

Security Management

Ksenia security innovation

Ksenia Security S.p.A.
Strada Proviciale Valtesino, 49
63065 Ripatransone (AP), Italy
Tel. +39 0735 751646 · Fax +39 0735 652281
info@kseniasecurity.com · www.kseniasecurity.com
Security & Home Automation: We connect homes
by re-inventing security products and solutions

Facility Security

wurster Ideen in Blech

Walter Wurster GmbH
Heckenrosenstraße 38-40
D-70771 Leinfelden-Echterdingen
Tel. +49 (0) 711/949 62-0
kontakt@wurster-online.de · www.wurster-online.de
Money handover systems fire resistant up to F90 and bullet
resistant up to FB7, cash trays, cash-drawers and facade
counters to pass through money, valuables, documents and
for installation in high-security areas, banks, petrol-stations,
pharmacies, sports – and cultural sites indoors and outdoors.

Video Technology

i-PRO

i-PRO EMEA B.V.
Laarderhoogtweg 25 · 1101 EB Amsterdam
Netherlands
https://i-pro.com/eu/en
High-quality CCTV solutions (IP & analogue),
Video Automation and IA, Sophisticated techno-
logies (FacePro, people masking), Cyber Security
Protection for GDPR compliance, VMS: Video Insight

Security Management

NSC Sicherheitstechnik GmbH

NSC Sicherheitstechnik GmbH
Lange Wand 3 · D-33719 Bielefeld
Tel. +49(0)521/13629-0 · Fax +49(0)521/13629-29
info@nsc-sicherheit.de · www.nsc-sicherheit.de
Fire Alarms, CCTV, Voice Alarm Systems

Video Technology

www.luna-hd.de

lunaHD
High Definition Video

Video surveillance • Video door intercom

Video Technology

BURG WÄCHTER
SANTEC

Santec BW AG
Womgermühle 1 ▪ 58540 Meinerzhagen
Tel. +49 2358/905 450 ▪ Fax +49 2358/905 499
santec_info@burg.biz ▪ www.santec-video.com
Video monitoring technology ▪ Video-over-IP
Outdoor IR sensors ▪ Planning and Services

Video Technology

IPS Intelligent Video Software

Securiton GmbH
IPS Intelligent Video Software
Kronstadter Str. 4 · 81677 Munich · Germany
Tel. +49 (0)89 4626168-0 · Fax +49 (0)89 46261688
info@ips-analytics.com · www.ips-analytics.com
Manufacturer of high-end video management software and intelligent video analytics software for real-time detection of potentially dangerous situations

TIME ACCESS

Time + Access

DoorBird
Technology meets Design.

Bird Home Automation GmbH
Uhlandstr. 165 • 10719 Berlin
Tel. +49 30 12084892 • Fax: +49 30 120858695
hello@doorbird.com • www.doorbird.com
Access Control; Building Automation;
Biometric Verification; IP Video Door Station;
IP Intercom; RFID; Customized Intercom
Systems; Made in Germany

Time + Access

CICHON STOLBERG
cryptin

Cichon+Stolberg GmbH
Wankelstraße 47-49, 50996 Köln
Tel. +49(0)2236/397-200 · Fax +49(0)2236/61144
info@cryptin.de www.cryptin.de
Operational data collection, time recording,
access control

Time + Access

deister electronic

deister electronic GmbH
Hermann-Bahlsen-Str. 11
D-30890 Barsinghausen
Tel. +49(0)5105/516-01 · Fax +49(0)5105/516-217
info.de@deister.com · www.deister.com
access control; vehicle identification;
biometric verification; guard tour systems;
storing and management of keys and valuables

Time + Access

FEIG

FEIG ELECTRONIC GMBH
Industriestrasse 1a · 35781 Weilburg
Tel. +49(0)6471/3109-375 · Fax +49(0)6471/3109-99
sales@feig.de · www.feig.de
RFID Readers (LF, HF, UHF) for access control,
vehicle identification, perimeter protection,
payment systems and much more

Time + Access

Gantner

GANTNER Electronic GmbH
Bundesstraße 12 · 6714 Nüziders · Austria
Tel. +43 5552 33944
info@gantner.com · www.gantner.com
access control solutions/biometrics,
time management, data capture, locking systems

Time + Access

pcs

PCS Systemtechnik GmbH
Pfälzer-Wald-Straße 36 · 81539 München
Tel. +49(0)89/68004-0 · Fax +49(0)89/68004-555
intus@pcs.com · www.pcs.com
Time recording, building security, access control,
Biometrics, Video, Visitor Management, SAP,
Hand Vein Recognition

Time + Access

phg
Die richtige Verbindung

phg
Peter Hengstler GmbH + Co. KG
D-78652 Deißlingen · Tel. +49(0)7420/89-0
datentechnik@phg.de · www.phg.de
RFID components for access control, timekeeping, factory data collection, canteen data, leisure applications, surface-mounted devices, flush-mounting components, biometrics, identification media and accessories

Time + Access

AZKOYEN primion Time & Security Division

primion Technology GmbH
Steinbeisstraße 2-4 · D-72510 Stetten a.K.M.
Tel. +49(0)7573/952-0 · Fax +49(0)7573/92034
info@primion.de · www.primion.de
Time management, access control and
management, staff deployment planning ,
graphic alarm management, SAP communications
solutions, pass and ID card production, Biometrics

Time + Access

STid
Electronic Identification

STid EMEA Headquarter
20, Parc d'activités des Pradeaux
13850 Greasque · France
Tel: +33 (0)4 42 12 60 60 · Fax: +33 (0)4 42 12 60 61
stid-security.com
access control, mobile access, electronic
identification, mobile ID readers, vehicle access

FIRE PROTECTION

Fire Protection

ESSER
by Honeywell

Novar GmbH a Honeywell Company
Dieselstraße 2 · D-41469 Neuss
Tel.: +49(0)2131/40615-600
Fax: +49(0)2131/40615-60
info@esser-systems.com · www.esser-systems.com
Fire Alarm systems, voice alarm systems,
emergency lighting systems, security systems

Fire Protection

HEKATRON
Brandschutz

Hekatron Vertriebs GmbH
Brühlmatten 9 · 79295 Sulzburg
Tel. +49(0)7634/500-0 · Fax +49(0)7634/6419
info@hekatron.de · www.hekatron.de
Fire alarm systems, Smoke switch systems,
Smoke alarms, Safety linkage systems

Fire Protection

LST

Labor Strauss Group
Headquarters: Wiegelestraße 36, 1230 Vienna, AUSTRIA
Tel.: +43 1 521 14-0
office@lst.at · www.laborstrauss.com
The specialists for fire detection systems and
extinguishing control systems

PLANT SAFETY

Plant Safety

PEPPERL+FUCHS

Pepperl+Fuchs SE
Lilienthalstraße 200 · 68307 Mannheim
Tel. 0621/776-1111 · Fax 0621/776-27-1111
fa-info@de.pepperl-fuchs.com
www.pepperl-fuchs.com
Security sensors, inductive, capacitive, opto-
electronic and ultrasonic sensors, vision sensors,
identification systems, interface modules

POWER SUPPLIES

Company Index

Imprint

WILEY