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Dear Readers,

In the last editorial, I gave you a preview on the shows that were scheduled for this autumn. To make a long story short, the shows were a success and delivered what was promised. Security Essen and Intersec Building in Frankfurt offered a great opportunity to meet each other in person and attracted a lot of visitors. Very likely, at Intersec in Dubai in January we will see the same. The show will attract a lot more attention than during the past two years of the pandemic. In our preview on p. 26 and the following pages, you can see what you can expect at the show. GIT SECURITY will be present at Intersec at the VIP and media lounges, but also at the Perimeter Protection show in Nuremburg, which takes place at the same date (January 17 to 19). If you would like to meet us in person at one of these shows, please feel free to send us a note via git-gs@wiley.com.

> Talking about industry shows, we are often asked if security and safety shows, websites and magazines are the right platform to bundle information in so many different vertical industries. Of course security and safety managers in a vertical market like the retail business have other demands and challenges compared to someone, who is trying to protect an enterprise that is part of a critical infrastructure. You will recognize this, when you have a look at the two overview articles, we have written for you a special focus article about the hospitality vertical (p. 56) and another one about security for banking (p. 72). With more and more vendors concentrating their business on specific verticals and some vendors even trying to sell their solutions beyond security, this is certainly a legit question that cannot be answered easily.

We think that, although there are different needs in different vertical industries, there are overarching demands, topics and solutions in all of the verticals. Good management systems for example are key to most of the security and safety applications and if they are properly installed, they can implement and handle many different extensions with ease, no matter if it is people counting in a supermarket or working with an alarm signal, when somebody is attacking a nuclear plant.

The use of video and the use of access control systems are two other overarching topics that are relevant for so many different industries. Although the details of use may vary, there are more common elements than differences. Of course, the algorithms for video analytics differ for different use cases, but the basis is the same. In all use cases, you need a great image quality, powerful engines to analyse the data and a good interface to display the results. In access control there are certainly different levels of security for the full diversity of applications, but very often it is just a combination of several security elements that raise the level of security to fulfil the different requirements. In all cases a user-friendly interface, the resilience against cybersecurity threats and an easy integration into other systems is a common asset, important for all industries. This is why we think one (good) magazine fits all.

Stay safe and enjoy reading this issue!

Heiko Baumgartner For Wiley's Safety and Security team



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A+A and glasstec Under New Management

As of 1st of December 2022, Lars Wismer (49) will lead the team of A+A, International Trade Fair for Safety, Security and Health at Work as well as glasstec, a major trade fair for the glass sector. He will be responsible not only for these events but also for the international Occupational Safety & Health Portfolio including the TOS+H, CIOSH and OS+HA trade fairs, as well as the international portfolio Glass Technologies with the glasspex and glasspro trade fairs for the Indian market. Wismer is a familiar face at Messe Düsseldorf, having worked there as



a senior project manager for 16 years. He has extensive experience in the management and marketing of large, international events, most recently in charge of D.SPORTS events, sales, PR/communication and marketing as executive director sports at D.LIVE. A+A and the 38th A+A Congress for Occupational Safety and Occupational Medicine will be held in Düsseldorf, Germany from 24 to 27 October 2023 and will focus on the megatrends sustainability and digitalisation.

www.aplusa-online.com

Bringing Technical Training to Dubai and Bahrain

Integrated security manufacturer TDSi met with over 50 new and existing security installers, specifiers, and distributors during its recent Security Technology Showcases in Dubai and Bahrain. Each event was a free interactive, hands-on session exploring the company's latest access control solutions and featured presentations from technology partners including KBC Networks and SimonsVoss. showcases were headed up by TDSi's international business development director Phil Tennent. A key part of TDSi's commitment to its partners and customers in the Middle East, the showcase delivers expert face-to-face training. TDSi also gave an overview presentation on its Vitaprotech Group sister company Sorhea's perimeter protection and intrusion detection solutions, and how these can be integrated with the Gardis ecosystem. www.tdsi.co.uk

Motorola Solutions to Supply Nationwide Network for Senegal's Emergency Services

The Government of Senegal, through the Ministry of the Interior, has awarded Motorola Solutions a contract to deploy a nationwide secure and resilient communications ASTRO P25 radio network to modernize public safety communications in Senegal. This will improve public safety by streamlining communication between Senegal's police, fire,



ambulance and other emergency services and will reduce emergency response times. The radio system will span more than 100 sites in Senegal. Motorola Solutions will also provide 24/7 technical support and maintenance. Patrick Fitting, head of sales Middle East, Africa and Central Asia at Motorola Solutions said, "The new network will also bring significant economic benefits to the country via extensive subcontracts and employment opportunities for Senegalese companies to support the system's installation and ongoing maintenance."

www.motorolasolutions.com

IFSEC Europe to Launch in October 2023

Taking place from 2-4 October 2023 at the RAI Amsterdam in the Netherlands, IFSEC Europe addresses the security and fire markets for a new pan-European event. While IFSEC International in London will remain the showpiece event, IFSEC Europe will be creating an engaging environment where professionals can find solutions to help deliver their projects. The event will provide a platform for attendees, exhibitors and speakers to create a focused European security dialogue. IFSEC Europe targets the wider European markets throughout the supply chain - end-users, installers, system integrators, consultants, and distributors. Amsterdam is centrally located and easily accessible, making it the ideal location for a pan-European security event. Each month, the Security in Focus podcast will bring conversations with leading figures in the physical security industry, covering everything from risk management to the key trends in tech and initiatives on diversity and inclusivity. It is available online, and on Spotify, Apple, and Google Podcasts. www.ifsecglobal.com

Vivotek Tailors AI Solutions Tracking People Flow for the Japanese City of Ise

Since 2020, the COVID-19 pandemic has taken heavy tolls on Japan's tourism industry. Affected by border lockdowns, foreign tourists cannot visit any attrac-



tions in Japan, among them in the City of Ise. Known for Ise Grand Shrine and surrounding streets, the city has dedicated much effort to revitalizing the region to promote tourism. Ise conducted a traffic flow investigation once a year, mainly through manual and visual observations, counting the local flow of people flow in a primitive way, which was insufficient to analyze business and sales. Vivotek have now installed a SC8131 stereo counting network camera at seven locations in downtown Ise, offering comprehensive 3D people flow counting solution. The network cameras are equipped with deep learning and video surveillance functionalities and capable of counting people and tracking traffic dynamics, achieving an accuracy of over 98 %.

www.vivotek.com

AMAG Technology Announces New President

AMAG Technology has appointed David Sullivan to the position of President. An industry veteran, he joins AMAG from ACRE Group where he has held positions of president international and president Americas, bringing a wealth of international experience in running a global security technology organization. He specializes in identifying strategic mergers and acquisitions, leading organizations through change, product development strategy, operational excellence and company culture transformation. "I look forward to growing the business and helping our customers, enhancing the Symmetry Security Management system through new innovations and ensuring AMAG's future success," he said. Sullivan began his career in 1985 at Honeywell and was part of the founding management team of HID, and also president and CEO for Destron Fearing and Assa Abloy subsidiary Fargo Electronics. www.amag.com

Research Shows Cybersecurity Remains a Top Concern

New research conducted by Genetec shows that cybersecurity remains a top concern for physical security professionals going into 2023. Based on insights from over 3,700 physical security leaders from around the world, the report revealed that almost half of the organizations surveyed had activated an improved cybersecurity strategy this year, and more than a third of all respondents are looking to invest in cybersecurity-related tools to improve their physical security environment in the next twelve months. When asked about the challenges faced when managing employee and visitor safety, more than half of the organizations selected cybersecurity as their main challenge. Of the many capabilities related to cybersecurity and data protection deployed by physical security teams in the last year, cyber-hardening of physical security hardware and access control management were the most popular, with 40% of respondents implementing new measures targeting those capabilities. www.genetec.com

Fire Detection and Alarm System for Prestigious Residential Development

Following a competitive tender, Global Fire Equipment (GFE) Turkey, was chosen to design, supply and install the fire detection and alarm system for Eston Sehir Mahallem, a prestigious residential development located in the Bahçesehir district of Istanbul, Turkey. Bahçesehir is an upmarket rural neighbor-



hood often referred to as the 'garden city' due to its abundance of green spaces. The development comprises 315 flats and villas on an area of 68,000 m². The design, installation and commissioning of the fire detection system was by GFE's appointed distributor in Turkey, GFE Bina Kontrol Sistemleri. The system meets the legislative requirements set by the Turkish Government for residential developments, which have become increasingly stringent in recent years, and comprises 18 addressable control panels, 200 Zeos addressable smoke detectors, as well as other addressable devices, such as manual call points, sounders and gas detectors. www.globalfire-equipment.com

The SmartWater Group is now DeterTech

Risk management company DeterTech, formerly known as The SmartWater Group, reveals its new identity, publicly shown for the first time at Security Essen on Stand 5C31. The new brand, and its associated purpose, value and behaviours, reflects the full breadth of the company's offering, as it embarks upon a geographic expansion of the business. "I'm proud to lead an organisation whose purpose is to bring greater peace of mind to people and communities, every day explains Baba Devani, CEO, DeterTech. Our values of commitment, inclusivity and ambition will guide us in developing new services and solutions, attracting top talent and entering new markets." With operations in the UK and mainland Europe, DeterTech works with hundreds of clients spanning critical infrastructure, construction, retail, leisure and hospitality, transportation and industry. www.detertech.com

700 Flir Smart City Sensors at FIFA World Cup 2022

Estimates suggest that around 1 million football fans will visit the FIFA World Cup 2022 in Qatar, taking place from 20 November to 18 December. The presence of vast pedestrian numbers in



one of Asia's smallest countries introduces traffic flow challenges that the Qatari government wanted to address in advance of this highly prestigious competition. As a result, the country has installed 700 Flir TrafiOne smart city sensors to monitor traffic and control crowd flow. These award-winning, all-in-one sensors from Teledyne Flir take advantage of Wi-Fi and thermal technologies to ensure traffic runs smoothly, while enhancing pedestrian safety. The Flir TrafiOne identifies pedestrian movement on the pavement and automatically adjusts traffic signal timing accordingly. It is possible to prioritise signals for pedestrians ahead of vehicle traffic, promoting safer, more effective pedestrian crossings during this festival of football. www.flir.com

Autonomous Infrared Barrier

Sorhea is upgrading its Solaris infrared barrier. The autonomous active infrared barrier is installed at numerous sites in Europe and throughout the world, its solar energy supply and radio communication making it a reference in the perimeter security market. Introduced in 2009, the Solaris column was the first 'low power' infrared barrier on the market. Its very low energy consumption allows it to operate in all weather conditions over a 100 m range. The solar power supply is backed up by a battery that guarantees two months of operation in complete darkness. The system has already been installed at various sites in Scandinavia and Canada, and functions just as well as a 12V or 230V powered system in these low light latitudes. Alarm information is transmitted without cabling via a dynamic radio mesh network. As no cabling is required, the column is easy to install and reduces civil engineering costs. Solaris won the GIT Security Award 2022: this prize is given every year by the international GIT SECURITY magazine to reward the most efficient perimeter security products with the most innovative functionality. To achieve the best possible infrared barrier performance, Sorhea boasts a high density of infrared beams that creates a vitrual wall that cannot be breached without sending an alarm. The denser the infrared wall, the finer and more reliable the detection. With ten cells on 3-meter columns, Solaris is currently the only existing autonomous infrared barrier offering such a high infrared density, over a range of 100 m. The system also benefits from Sorhea's technological progress on the radio: full encryption of the Solaris radio network ensures maximum data security, and communication via the LoRa protocol offers long range, energy savings and good resistance to interference. The train-filtering functionality, so far only available on Maxiris barriers, is now also available on autonomous Solaris NG barriers. This algorithm can tell the difference between a vehicle (train, tram, or even a plane) and an individual passing between two columns, so no unwanted alarm is created and the perimeter security system is not interrupted. This new generation is also available in an all-plastic version: made of polyacetal, the housing makes the column frangible. Solaris NG can then be installed on very specific sites such as airport www.sorhea.com runways and high voltage transformer sites.

Stored Lighting Power for Video Surveillance

Using the street lighting infrastructure, the Slat LiFePO4 technology inside Epvideo charges at night when the lights are on and releases the stored energy to the networked objects, mostly cameras, during the day. The new EPV4 models enable the connection of up to six cameras and carry out automatic remote maintenance work. They have been developed to meet different requirements and, depending on the model type, are resistant to particularly intense solar radiation (Sun Shield), suitable for very low temperatures (Extreme Cold -40 °C) and provide full storage capacity even when the lights are switched off at night (Night Out). The hybrid model (Solar) can reduce electricity costs and set an example in terms of sustainability. EPV4 supplies devices with up to 90W via PoE (total 240W) and includes a managed Layer 2 switch as well as a secured web server and a SNMP connection. Data can be transmitted 20 km via fiber optic cables. Various functions



ensure that the transmission of video streams is managed efficiently (VLAN, QoS, IGMP, RSTP). The housing is highly durable and contains a dedicated space for customer equipment, while installer-friendly details allow rapid commissioning. www.slat.com/en

Netwatch North America Integrates with Eagle Eye Networks

Netwatch North America announced a premiere partnership with Eagle Eye Networks to integrate the Eagle Eye Cloud VMS (video management system) with Netwatch's proactive video monitoring service. The technology collaboration combines cloud-based video and audio monitoring initiatives with artificial intelligence (AI) technology, such as AI-filtered alerts, that reduce false positive alarms and deliver the simplicity and performance modern organizations require. Netwatch Proactive Video Monitoring is now fully integrated with Eagle Eye, a cyber-secure, cloud VMS for many security and business use cases, including loss prevention, workplace safety, security, business optimization, alarm management, and more. Netwatch PVM is a purpose-built platform designed to help stop crimes before they happen by using personalized audio voice downs that stop crime on 98 percent of occasions. The integrated solution will be available for general release in early 2023. https://netwatchusa.com - www.een.com

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New Research Shows 90 Percent of False Fire Alarms are Due to Faulty Apparatus

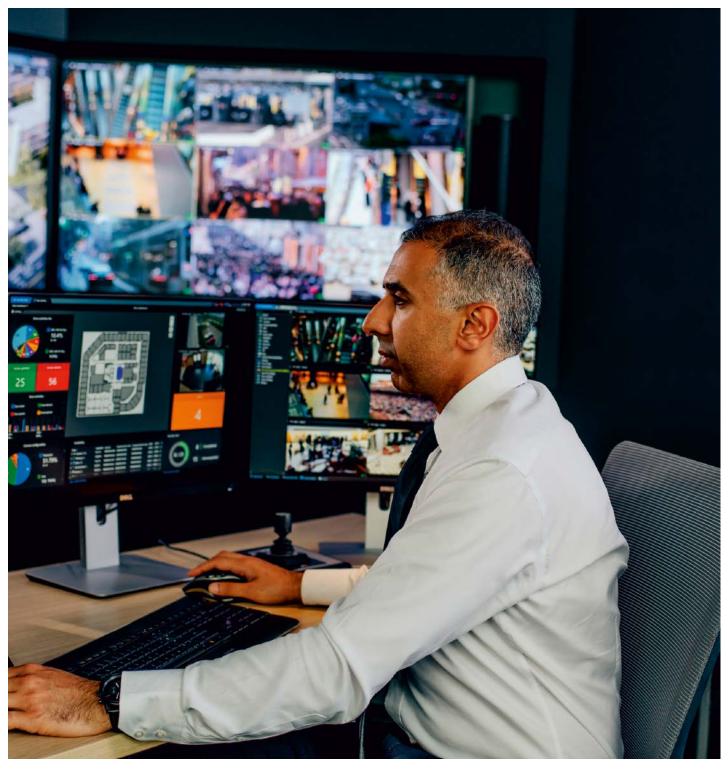
According to the latest Home Office report, released recently, false alarms make up 98 percent of automatic fire alarm confirmed incidents in 2020/21; 90 percent of this figure is due to faulty apparatus. The research from the Home Office, which was collated from Fire and Rescue services across the country from the last financial year, shows that just two percent of the incidents from automatic fire alarms were a result of an actual fire. Most of the false alarms could easily be avoided with proper maintenance and by ensuring the correct type of life safety product is installed for the environment in the first place. Commenting on this latest report from the home office, Mr Shinsuke Kubo, Commercial Director for Hochiki Europe, Middle East, Africa and India said "False alarms are a major problem across multiple industries, they have a significant impact on production and ultimately the economy. Building owners who choose to work with installers and manufacturers who understand that no two environments are the same will reap the benefits because the products recommended will be both fit for purpose and www.hochikieurope.com properly maintained."

Detecting Intrusion on Roofs

With a sharp increase in the price of copper, theft of the metal in heritage buildings has become a global issue. This was the case for a high school in Georgia, North America, victims of copper theft who needed to protect their rooftops. Because of



labour and the cost associated with wiring, along with the difficulty of bringing power to the rooftops, they selected battery-powered wireless PIRs which allowed quick installation and fast deployment of the security system protecting against copper and other related thefts. Optex Redscan LiDAR range can cover large roofs, up to 100m, providing up to eight detection zones for camera activation and have the ability to define the target size. They can be mounted on the top on the roof to scan the area, and can also be mounted on the edge of the roof, one per side to capture anyone climbing along the wall and crossing the virtual ceiling created by the sensor before reaching the roof. Flat roofs on commercial buildings are relatively easy to access, using the fire escape staircase, adjacent buildings, ladders, or even the top of high vehicles. Depending on the level of threats and how sophisticated the criminals are, there are a range of detection solutions that are well suited to a wide variety of sites and operational requirements. Ideal for smaller retail units, panoramic 180 degree PIR and dual tech sensors such as Optex WXS series can cover up 12m radius detection area and have two independent zones for dome camera activation, with the ability ignore small animals avoiding nuisance alarms. High-security sites, particularly where there are roofs with skylights and glass facades, are an ideal application for 2D LiDAR sensors as their performance is not detected by light reflections. www.optex-europe.com



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CORPORATE SECURITY

Set Your Sails Right

GIT SECURITY in Conversation with Julia Vincke, Vice President Security, BASF Group

With around 230 production locations in 90 countries, BASF is the largest chemical company worldwide. It employs more than 111,000 people. Since March, Julia Vincke has been heading up the security organisation as Vice President Security, BASF Group. Previously, among others, she was with Volkswagen and working in high risk countries such as Afghanistan and Libya. GIT SECURITY spoke with Julia Vincke about the enormous challenges of her job and her strategic approach to address them.

> Ms. Vincke, many thanks for taking the time for this interview with GIT SECURITY. Only recently — in March of this year — you took over the task of global security of the BASF concern, the largest chemicals company of all. This is really not an insignificant task...?

Julia Vincke: Many thanks for the invitation to be interviewed, which I am very happy to accept, especially in my new role as head of Group Security for BASF. As you rightly say, BASF is the largest chemical company worldwide, represented in 90 countries with more than 230 production locations and more than 111,000 employees worldwide. And because of those figures, it is extremely important to approach the job with the necessary respect, but not being timid. Of course, at the beginning there is a lot of listening and learning to do about both the employees and the company itself. But it was made easy for me by a dedicated and competent team that I can rely on and that supports me, even though my start coincided with the start of the war in Ukraine. So out of initial healthy respect for the new job and all its facets, I quickly developed a lot of enthusiasm. For that I am very grateful, even though I effectively assumed responsibility for the security of people and the BASF company's values overnight.

> A brief word about your background: you were previously with VW, and before that with Mediamarkt-Saturn. You were also with the police in Lower Saxony for 17 years — and can look back at some time spent in Afghanistan and Libya. The strong international aspect of your career will certainly help you with your new job ...



Julia Vincke: Yes, I have accumulated broad security experience: I understand the regulatory, international, academic and commercial contexts. But of course you are right, my experience abroad, in particular in high-risk countries, has influenced me and set me up well for my professional career. To have gathered international experience as well as built up the corresponding networks all helps me in my handling of security matters.

Security is not just relevant here in Ludwigshafen, especially in a globalized world and in this era of digitalization. Global crises always have a long-term effect on the security situation, nationally, regionally or internationally, as we all found out when the Covid-19 pandemic or the current Ukraine war started. I have always strived to understand geopolitical contexts. If we take the examples of Libya and Afghanistan, we just had to stand and watch what has become of long-term international efforts as Gaddafi was overpowered and the Taliban took over. We are now facing a similar challenge in Ukraine because the impact of this war goes way beyond security concerns. I very much appreciate the opportunity to discuss many different matters in close cooperation with those responsible for security in different regions of the world and to tackle the resultant challenges, and also to work internationally at BASF. The company has agencies and manufacturing sites in 90 countries around the world.

As Vice President of Security, you are not just responsible for the main site in Ludwigshafen. How is the subject of security organized globally? Julia Vincke: As a globally active company, BASF is just like any other company and confronted daily with a whole host of security risks. We can only withstand these if we have a robust security infrastructure and promote and live out teamwork. Apart from our central security organization in our main location of Ludwigshafen, which consists of four groups with different priorities, I also have a team of Regional Security Managers in the USA, South America and Asia who are correspondingly responsible for numerous so-called Area Security Managers at a national level and Site Security Managers at each location.

IT Security at BASF belongs to a separate department...?

Julia Vincke: The progression of digitalization of the working place means that the border between physical and digital security is becoming increasingly vague. Of course, we recognize this convergence at BASF as well, and for this reason all the departments that have to deal with security work in close collaboration together – independently of their organizational membership. Security can only be assured with an overall approach. The classic silo mentality has been obsolete for a while, and only a comprehensive management approach to this subject has any future.

You mentioned in our chat before that company security departments have mostly grown over time – and mostly with an antiquated structure. You are currently building your team. What do you want to change and do differently? What will your team look like?

Julia Vincke: Historically, the world of security was never notably diverse, in particular not in middle management or even in upper management. Luckily we can now see a trend that is softening the traditional structures. The working place is currently undergoing a fundamental change. The creation, establishment and success of security organizations depend largely on the people implementing them as well as the availability of suitable personnel. This situation is being intensified not least by the digital transformation, demographic change as well as competition for talented people. For these reasons, building up the staff of security departments has become much more complex than simply recruiting people with various expertise.

Security departments in industry have traditionally recruited most of their staff from state security authorities wherever possible, that was the case for me personally too. For many years, the best qualification for a security job in industry was previous employment with the police, secret service or the military forces.

The spectrum of competence of futureoriented as well as capable and competitive security departments must be urgently broadened. There must be a focus on the integration of job skills such as process competence, technology competence, the ability to create strategies and innovation ability. I am convinced that we must cross into new terrain in order to find and retain suitable and responsible personnel. An elementary role will be played here by the diversity of gender, age, ethnicity and professional experience, but also by the salary. A security expert whom I highly respect, Marco Cabric, said on this subject that security departments must transform from 'James Bonding' to 'bonding'.

The compilation of successful teams in security departments must be approached in such a way that they are equipped to carry out complex tasks throughout many-layered structures, in sometimes unclear situations and beyond geographic boundaries. This requires a future-oriented personnel strategy that promotes and supports the competencies mentioned above. I have taken this approach to heart in the past when building my teams and naturally want to do this in the future as well. My teams at BASF Group Security are already very diverse with respect to their professional expertise. I have employees who don't actually have a classic security background but, for example, an academic qualification in informatics, political sciences, economics, digital forensics or intelligence instead. These different points of view toward the subject of security enable us to have a holistic method of evaluation.

Under the heading of 'Team': you are one of very few women in such a management position – in general there are comparatively few women in the security industry. What is your opinion on this?

Julia Vincke: The question is really inseparable from what I have just said. The world of Group Security really is still dominated by men; as far as I know, only three women head up security organizations in the DAX 40 companies. There is, of course, room for improvement here, not least because security departments already have many great women at the second or third level. And ever more women are studying security and risk management. In spite of this, security departents need to be more transparent about the profession by promoting it in a modern fashion and make it appealing to women. The subject of 'Women in Security' is close to my heart; I have recently started an internal photographic campaign that has given women in BASF Group Security a face. The feedback was unbelievably positive, which was very pleasing. Meanwhile there are some initiatives in industry that have taken up exactly this subject. I am planning some events together with other female heads of security in which we will promote the subject of security, and in particular for the so-called millennials.

Let's take a closer look at the targets and strategies of Group Security at BASF. Could you give us an overview — in spite of the complexity of the matter?

Julia Vincke: Security departments have to overcome complex challenges against a background of globally changing circumstances. Apart from a well-defined brief, security departments need a strategy and the ability to make plans in order to cope with the current situation. Long-term thinking is essential if you want to develop an effective security strategy. Long-term trends such as a changing regulatory environment, social, commercial, geographic or political conditions must be considered when formulating the relevant strategy.

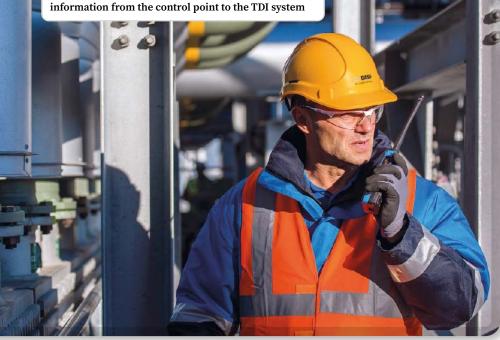
A security strategy is, of course, always adapted to the strategy of that particular company. And there are differences, depending on the industry sector. In addition, we are living in a VUCA world (Volatility, Uncertainty, Complexity and Ambiguity) and just in the last few years we have seen just how vulnerable we all are as a country, a company or as a civil population. Starting with the Covid-19 pandemic, considering the catastrophic flooding in Europe, and now to the current war in Ukraine. Crises will become more intense in the future, both quantitatively and qualitatively, and it must therefore be part of our security strategy to cope adequately with such events.

Crisis anticipation, crisis management and crisis evaluation are a fundamental part in this context, also for BASF. It is a little like Aristoteles said: We can't change the wind, but we can set the sails right. New criminal phenomena always surface whenever there is a crisis because, as perfidious as it is, criminal networks make use of crises – whether they are of a political nature, wars, pandemics or natural catastrophes – to fill emerging security vacuums. It is therefore always important for corporate security to be aware of current developments.

... an enormous and complex problem ...

Julia Vincke: That can only be achieved together with other security-related stakeholders because security is interdisciplinary. That applies in particular to the interlinking between the government, commerce, research, NGOs and society. Some examples would be the establishment of public-private partnerships, or initiatives such as the 'Global Player Initiative', or the 'Alliance for Security in Commerce'. When we look at the soft factors of a security strategy, then even the best strategy and the most competent team can only respond if the security culture has been adequately embedded in the DNA of the company. That is the case at BASF. It is essential to sensitize all the employees to the volatility of this considerably complex subject. We achieve that through specific training opportunities, compulsory training and awareness campaigns. I am a big fan of marketing the subject of security in a positive and modern way. I am honestly convinced that security marketing is a corporate value that should not only be a positive, distinctive feature of security departments but rather that can be a counterweight to physical or digital criminal phenomena as well as disinformation.

The toluene di-isocyanate (TDI) system at the Ludwigshafen location has a capacity of 300,000 tons. Matthias Dehm, the plant operator, transfers measuring point information from the control point to the TDI system



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Group security also uses drones. Here we see Calogero Galvano from the Drone Competence Center



On a broad scale, where do you see the greatest challenges for Group Ssecurity at BASF in the next few years?

Julia Vincke: I am sure that we will be facing significant challenges as a security organization, but that is what makes our job so exciting. Viewed globally, we will see how world commerce shifts in the short, middle and long-term, how the form of conflict changes, how climate change becomes more intense, how there will be a growing threat of terrorism and how the world order is rearranged. The last item has become particularly relevant since the invasion of Ukraine. The volatile global security situation influenced by geopolitical crises, migration, organized crime, humanitarian crises, natural catastrophes, as well as hybrid threat scenarios, all create special challenges for every security department, and of course for countries and commerce. I find the increase of politically-motivated violence particularly concerning, which has reached a new level during the pandemic. Ever more people are turning away from democratic constitutions and forming subcultures. According to the Allianz Risk Barometer, political risks and violence have meanwhile entered the Top 10 of corporate risks.

Apart from the obvious physical threat scenarios, we are now living in a world of invisible dangers, and that is why security strategies cannot be based on the threat environment of yesterday. Strategic foresight is a valuable motor of transformative processes if these are integrated early enough into the DNA of the respective organization. Artificial intelligence, biometrics, drone technology, big data and virtual reality have become the 'Game Changers' for security departments. BASF, for example, has its own drone competence center that we are constantly expanding and plan to work together with the security authorities.

Disruptive technologies, however, also have their downside because, apart from data protection limitations, these technologies are also vulnerable and not immune to external attacks. These include cyber-criminality, spying and sabotage. As a result, it is necessary to adopt a holistic protection against everything that makes our digital ecosystem vulnerable, to follow a security-by-design approach and to have information security in mind. And we come back to the close cooperation that I mentioned before because it is necessary for security departments more than ever to establish themselves in the melting pot between logical and physical security. To put it briefly: I think that it will be in the region between the unpredictability versus resilience. It is important with a combined effort to be prepared. It will be a long time before the global immune system has recovered from the current crises and a weakened immune system is well known to be more susceptible.

Could you tell us what security-related problems and consequences the attack on Ukraine had and now has for BASF?

Julia Vincke: BASF condemns the attack ordered by the Russian government on Ukraine to the highest degree. We stand in solidarity together with the people of Ukraine and hope that this war can be ended as soon as possible. We are very concerned for everyone who has been affected by the conflict, and especially our colleagues and their families in Ukraine who are currently experiencing unbelievable hardship. Just like many other companies, BASF and we in the corporate security department were first of all concerned with the safety of our local employees when Ukraine was invaded. We concentrated on getting employees and their close relatives - at least the women and children - either to safe places within Ukraine or to neighboring countries. We were also able to get personal protection equipment, such as helmets and flak jackets, as well as sleeping bags and medicines into the country. We also provide psychological support for our employees — if they wish to receive it. The solidarity, the readiness to donate and the enthusiasm of our entire BASF family really impressed me in this situation. Apart from all that, we at corporate security set up local and regional crisis teams and have already taken part in a number of crisis team meetings. My international team is constantly working on ensuring the safety of our employees.

How much effort is required to discover and counter 'white collar crimes' and the problem of internal criminals, and what strategies do you employ against them?

Julia Vincke: Commercial crime is also a problem in Germany that comes in many different guises, so there can be no general

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definition of it. All the various types of commercial crime such as fraud, bribery, disloyalty, theft, money laundering etc. regularly cause a large part of the total damage of all crimes that are recorded by the criminal statistics issued by the police. Commercial crime is therefore so concerning for companies because the threats not only come from outside - the role of potential outsiders should not be underestimated. Internal crime is not a fictive phenomenon, and can happen in any company. Current analyses show that internal offenders were working together with external organizations in fifteen percent of cases. It is therefore very important for security departments to define and implement appropriate protection measures to make the risk manageable. But it is necessary, however, to make sure you're not just being generally suspicious of your own employees or others.

Even though the risk of internal crime can never be totally prevented, there are tools available to counteract it. I already mentioned the subject of company culture – if you're talking about soft factors, it is beneficial to create working conditions that are respectful, trusting and cooperative. Making employees aware of potentially risky situations in which internal knowledge could be obtained by people outside the company is another protective element against internal offenders. BASF already carries out many educational campaigns on this subject, and there are some really great items available via the various media channels that cover the subject informatively and appropriately. Apart from that, it is essential to establish counter-measures. These can include pre-employment screenings, checking sanction lists, conclusion of non-disclosure agreements, IT asset management, identity and authorization management for example, but also access controls.

Finally Ms. Vincke: What have been your early impressions of the company you now work for, and what will you be mainly concerned with in your first year?

Julia Vincke: BASF is a very exciting and highly complex organization with a staggeringly varied product portfolio. Even though I've already passed my first 100 days, I still have an enormous learning curve ahead of me over the next few months. And exactly that is important for me: to get to know the company as well as possible, to understand its relationships, its networks and visions, which then enable me to develop a sustainable security strategy. I am really excited to be starting this 'learning journey'. But I'm also looking forward together with my team to maybe deviating slightly left or right from the previous course and trying out new things. But apart from that, I will of course have to handle all the security aspects I mentioned before, not least the war in Ukraine, perhaps another wave of Covid-19 and much more.

What is special at BASF by the way, and something that is important to say, are the people and the great welcome feeling they gave me when I started and I still feel every day. That is not a given, and I'm very grateful for it.

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COVER STORY

For a Better Life

Thomas Quante Talks About Reliable Ways to Boost Energy Efficiency and Achieve Carbon Neutrality – And About Bosch as an Attractive Employer

GIT SECURITY spoke to Thomas Quante, CEO of Bosch Building Technologies. The discussion took place in Berlin at the "Bosch Connected World 2022" – the international industry event for digital transformation and artificial intelligence. In the interview, he reveals what the global building sector can do to boost energy efficiency, sustainability, security and safety, which sector-wide alliances are currently being formed, and what it takes to be an attractive employer.

GIT SECURITY: Mr. Quante, at the Bosch Connected World (BCW), the focus is all about combining artificial intelligence and the Internet of Things – in other words, AIoT – and about digital transformation. Taking quite a broad approach, we can say that BCW is taking place against the backdrop of climate change, the energy crisis and efforts to boost sustainability. How is Bosch Building Technologies positioning itself in this regard?

Thomas Quante: As a solutions provider for commercial buildings and industrial applications, we regard energy efficiency, sustainability and comfort as key priorities. People should feel safe and comfortable in buildings and critical infrastructure. Buildings can play a big part in reducing greenhouse gases – both our customers' emissions and our own. This is also important in light of the increased ESG reporting requirements companies are facing...

...In other words, their obligations to report on environmental, social and governance issues.

Thomas Quante: That's right. In terms of e-mobility, we are already making very good progress as a society, getting around in a more environmentally friendly way. Now, attention is increasingly turning to operating buildings friendly way. Here, too, the energy balance is really

important as a way of reducing the carbon footprint. After all, the building sector is responsible for 40 percent of CO_2 emissions worldwide.

What does that mean in concrete terms?

Thomas Quante: To give you one example, it's important that people feel comfortable in their workplace. At the same time, hybrid working is pretty common everywhere. We therefore need to design buildings and workspaces in such a way that they are energy efficient and sustainable, even when employees are only coming into the office two or three days a week. Ideally, their workspaces should only be heated when necessary, for instance, rather than all the time.

Incidentally, all these considerations have also led to our decision to relocate our Bosch Building Technologies headquarters to a new site. The decision was based on a whole new concept that will make hybrid working easier and also make us an even more attractive employer for new associates. In our future location – which will be carbon neutral – the surface area we use will be just 60 percent of the area we have used up until now. Instead of fixed offices, we will also be offering co-working spaces in the future for our associates who only come into the office occasionally.

In general terms, what is the major aim – the mission behind the Bosch Building Technologies commitment to greater sustainability?

Thomas Quante: We want to reduce energy requirements – and, therefore, the associated emissions – to a minimum, thereby cutting costs and protecting the environment, both for our customers and for ourselves. This is all fully in line with our mission, namely "Building solutions for a better life" – the approach that we are taking to meet the growing demand for security and safety, comfort and energy efficiency.

Can you give us some specific examples?

Thomas Quante: The Bosch Building Technologies "Energy Platform" – our comprehensive, cloud-based application with real-time analysis of energy data – is making an important contribution to achieving climate neutrality. It is already in use at more than 120 Bosch plants and sites worldwide and is optimizing energy use throughout the Bosch Group. Our takeovers of experienced building automation companies – Climatec in the United States and GFR as well as Hörburger in Germany – are also important in terms of our corporate strategy. These companies have been part of the Bosch family since 2015, 2019 and 2021, respectively. With this strong team and these companies' core skills and solutions, we are ideally placed to further optimize the operation of buildings.

We also set up a consultancy company, Bosch Climate Solutions GmbH, to share our expertise with other companies and help them on their way to carbon neutrality. Bosch Climate Solutions is now part of Bosch Building Technologies. There are already around 30 reference customers, including some big names such as Trumpf, Würth, Kistler and Chiron.

All in all, Bosch Building Technologies offers a comprehensive range of services from consultancy to project implementation via our system integrator business and support throughout the entire life cycle.

At the Light + Building 2022, visitors gained their first insights into the "Nexospace" digital service suite. What is at the core of this suite, and which specific services does it offer? Thomas Quante (I.), CEO of Bosch Building Technologies meeting GIT SECURITY at Bosch Connected World 2022 in Berlin

Thomas Quante: With the cloudbased Nexospace platform, we are operating a data highway - and we're now also making this highway available to third parties. It's all about the targeted analysis of sensor data for the convenient, integrated digital management of commercial buildings. All IoT-supported service solutions for building management are being bundled together for the first time under the Nexospace name. The aggregated data analysis from all building technology systems reveals potential for improvements, and also ensures smoother operating procedures.

We have already started by launching three services. The "Nexospace Fire System Analyzer" makes it possible to gain a rapid overview of the status of fire detection systems from anywhere. A cockpit shows the current system status, the digital logbook and the plan for future replacement activities, which makes investment planning easier. There is also the "Nexospace Performance Optimizer" for efficient building automation. It is currently still in the pilot phase, but it constantly analyzes performance and consumption data produced by the building technology. The "Nexospace Cyber Security Guard" protects Windows-based security systems against viruses and other malware. In other words, it is a service that prevents potential cyberattacks.

So does this mean that the iPad will be replacing the screwdriver in the future?

Thomas Quante: (Laughs) You might say that! We are certainly in the midst of the digital transformation and it's also vital to make sure the whole team is on board with it. That's why the combination is so important – we need experienced service engineers who can perform complex maintenance, for example, along with digital experts.

You are obviously going to a lot of effort to improve sustainability for your customers. What about Bosch's own environmental footprint at the moment?

Thomas Quante: Needless to say, with all our initiatives, it is important we get our own house in order first. At Bosch, we are working hard on various measures to boost our own climate neutrality by applying four levers. First of all, we are substantially increasing our energy efficiency – and have approved a budget of 100 million euros a year up to 2030 for this purpose. Our second lever is "new clean power" – at Bosch, we want to increase the amount of renewable energy generated by our own production and produce 400 Gigawatt hours each year ourselves by 2030. Thirdly, we want to purchase green electricity. Finally, our fourth lever involves measures to offset unavoidable emissions.

Returning to the subject of your services and solutions for the building sector, are you also working in collaboration with other partners to overcome these complex challenges?

Thomas Quante: It's certainly not something that can be done unilaterally. We firmly believe that close collaboration with strategic partners is vital. We are currently working with 45 partners to develop an open, domain-spanning, cloud-based ecosystem. This involves combining and integrating all building systems, services and software solutions from a wide range of applications. By performing AI-based analysis of all data points, we generate robust, auditable data for the ESG reporting we have already spoken about, and also use this data to identify optimization potential for our customers.

What is the latest about the hardware product strategy at Bosch Building Technologies?

Thomas Quante: We have a very diverse product range in this area, too, and so we are

in a good starting position. We offer fire protection and building automation systems, voice alarm systems, professional audio communication systems, and video, intrusion and access control systems.

In terms of the key area of AI, we also benefit hugely from cross-divisional collaboration – "leverage the power of Bosch" is how we put it. We have already produced some outstanding AI innovations and are continuing to focus on this. One example is the area of fire protection and our Aviotec product...

...That is your video-based early fire detection system.

Thomas Quante: Yes, that's right. With Aviotec, we are already far exceeding the relevant regulations. I can give you another example from our video system product range. When you think about security operators, you realize just how challenging their work is – they need to monitor everything by keeping an eye on all the things that matter. Too many false alarms can easily cause them to become less vigilant. However, our AI-supported systems help them identify the things that are really relevant, which is an efficient way of ensuring buildings or perimeters remain secure.

It is worth mentioning at this point that Bosch Building Technologies recently came out very well in the recent "GIT System Test Video Analytics", despite competing against some other big names on the market. The intelligent video analytics, along with the cameras, work brilliantly...

Thomas Quante: ...Yes, and of course that doesn't surprise me at all. It's exactly why our customers put their trust in us for so many different projects – including and especially when it comes to critical infrastructure.

Ambitious projects and plans call for committed staff – what does Bosch do in terms of its corporate culture and to promote a sense of cohesion among all its associates?

Thomas Quante: For us, this aspect is quite simply crucial for safeguarding our future. We always want to be the company of choice in the industry – for both young talents as well as experienced professionals – regardless of whether we are competing against other large companies or mid-sized ones. We really do have a huge amount to offer – especially the purpose of our company, which is "Building solutions for a better life". We maintain partnerships with universities in both Germany and other countries, and we organize hackathons. At these events, many digitally talented individuals work together to develop new solutions for a better future, creating valuable points of contact between them and our company at the same time. We are delighted that these events are attracting more and more women.

Bosch Connected World 2022

Since 2014, Bosch Connected World's mission is to bring AIoT and digital transformation to the forefront of businesses. With its conference, exhibition, and many networking opportunities, this annual event is constantly evolving and growing to further advance the creation of connected products and solutions invented for life. On November 9 and 10, 2022, BCW returned with a hybrid set up: You could decide to join the event on-site in Berlin, Germany, or online from wherever.

Conference part

The visitors had the opportunity to experience keynote speeches, domain-focused breakout sessions, panel discussions, expert talks and interviews, and workshops across four stages. This year's program focused on the next wave of digital transformation and the shift toward digital OEMs. A wide range of sessions presented strategies, best practices, and case studies on smart, connected, and sustainable products and solutions enabled by AIoT. Acting sustainably by saving energy and resources is a core aspect in all sessions.

Hybrid exhibition

The hybrid exhibition featured Bosch and more than 80 AI and IoT companies and innovative start-ups spread across 6,000 square meters of exhibition space in Berlin and "uncountable" square meters online. The ecosystem, consisting of Bosch, its customers, and its partners, convened at this annual event to present successfully implemented products, software, and services in the AIoT. This included areas such as buildings, energy, logistics, manufacturing, mobility, smart life, and transportation.

Key note: CEOs of Bosch and BMW

In the opening key note Stefan Hartung, Chairman of the Bosch Board of Management, and Oliver Zipse, Chairman of the BMW Board of Management, spoke about the future of mobility, how digitalization, electrification and sustainability are transforming this industry. What the incumbents can learn from mobility start-ups, and vice versa. Andrew Ng, Founder & CEO of Landing AI and one of the most well-known AI experts worldwide, gave an insight how Artificial Intelligence as the latest disruptive technology is fuelling the digital transformation not only in mobility.

Sustainable building lifecycle

Improvements to building operations can have huge impacts on tenant satisfaction, sustainability, efficiency, and safety. Key topics of the special session "Sustainable building lifecycle", hosted by Thomas Quante, CEO of Bosch Building Technologies, included building automation, security, safety, and energy efficiency. The auditorium received hints, how state-of-the-art AIoT technology can help to achieve energy efficiency targets. Panel discussions and presentations debated and presented the extent to which the topics of energy efficiency and sustainability have already arrived in the real estate sector - with the answer here being that it was still very much in the early stages. And that the topic of ESG was not yet interpreted clearly enough. After providing some answers and practical examples, this session closed out the building-lifecycle discussion with a holistic perspective on building operations – and with a presentation of the new Bosch offer Nexospace by Chief Architect Andreas Mauer.



Conference opening – here with Bosch CEO Stefan Hartung (I.), and moderator Dirk Slama. Center, joined by screen: Al pioneer Andrew Ng



Key note: Bosch CEO Stefan Hartung



Session speakers: Thomas Quante (Bosch Building Technologies), moderator Jennifer Sarah Boone, Marcus Nadenau (Bosch Building Technologies), Dirk Dittrich (Edge), Andreas Kuehne (Bauakademie), Dominik Brunner (Arelio), Jan von Mallinckrodt (Union Investment RE), Johannes Kreissig (DGNB) and Andreas Mauer (Bosch Building Technologies)

What else do you offer to attract the most talented individuals?

Thomas Quante: A huge amount! For example, we offer a lot of flexibility in terms of working hours and workplace. Our associates even have the option of working away from home in another country for a certain number of days. Here, once again, what matters most is human well-being – the well-being of our associates in this case. And, after all, that leads to the best results.

At the same time, we want to make our onsite working conditions as attractive as possible so that our associates also enjoy getting together in person. After all, when people are in direct contact with one another they often come up with the best ideas. You can observe that here, too, at the Bosch Connected World. The talks that take place here, the ideas that are produced and the connections that are made are irreplaceable.

If we may finish by asking a more personal question, what do you do to recharge your batteries in the little spare time you no doubt have?

Thomas Quante: (Laughs) I've been with Bosch for 28 years now and still enjoy it. Away from work, I like spending time with my wife and two daughters. I also enjoy getting out into the fresh air with my dog. That's all I need.

Thank you for talking to us.

CONTACT

Bosch Building Technologies Grasbrunn, Germany Tel.: +49 89 6290-0 info.service@de.bosch.com www.boschbuildingtechnologies.com Milestone Systems has unveiled plans to bring its pioneering video technology beyond the traditional security market with new specialized solutions, including a special healthcare solution, and has announced Milestone Kite for small- to mediumsized businesses and organizations.

Video Technology

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INTERVIEW

Video Can Change the Game

Milestone Develops Specialized Solutions for Critical Industries and SMB

Summit in Dubai, Milestone Partner Summit in Dubai, Milestone Systems' CEO Thomas Jensen revealed details of how the provider of XProtect aims to empower people, businesses and societies with data-driven video technology software that serves end users both in and beyond the traditional video security industry.

As part of this growth strategy, Milestone aims to more than double its annual turnover within the next five years. Milestone's CEO also committed to continuing to strengthen the company's position as a responsible technology organization. "We are preparing to revolutionize our industry by using data-driven video technology both in and beyond security," said Jensen.

Data-Driven Video Technology as an Enabler

While maintaining its core safety and security video management offering, Milestone will introduce video solutions for various industries from 2023 onwards. Next year, it will launch new solutions aimed at the healthcare industry, starting with videoenabled solutions for hospitals. "We see a future in which data-driven video technology is a game-changer that will help to make the world a better place for us all," Jensen told Milestone's top partner resellers, system integrators, security specialists, and service providers who attended MIPS.

Jensen outlined how XProtect, which can be integrated with the widest choice of devices and other security solutions, currently enables people to understand the world they see by viewing recorded or real-time video data. Through the responsible use of data-driven video technology, XProtect will soon be able to predict events before they happen, which will further enhance Milestone's offering in and beyond security.

As Milestone continues to invest in strengthening its core platform and XProtect software, the company aims to serve as a blueprint for how other leading technology firms can engage in responsible business practices that benefit societies at large.

Health Care Applications

MILES1

In the healthcare industry, Milestone's key asset is the XProtect open platform video management system that can build the basis for bringing together video and data integrations, video analytics, and cloud solutions to address critical industry needs. XProtect currently supports more than 11,000 different security devices from more than 500 manufacturers. In addition, the company's ecosystem of technology partners includes providers of network video cameras, cloud services, storage equipment, access control,

Kite for Small- to Medium-sized Businesses and Organizations

Milestone continues to increase its range of on-premise, hybrid-cloud, and cloud-native data-driven video technology solutions. The new Milestone Kite Video Surveillance as a Service (VSaaS) complements Milestone's existing XProtect on Amazon Web Services (AWS). Milestone Kite is a simple, secure, and scalable VSaaS solution for small- to

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Milestone Systems' CEO Thomas Jensen at MIPS 2022 in Dubai



medium-sized businesses, where XProtect on AWS is optimized for the enterprise market.

Milestone Kite is aimed at single or distributed organizations that need an easy way to centrally manage all their sites in one unified system. Providing continuous access to new features with little or no maintenance effort, it is designed for businesses and enterprises with high value, less complexity, and multiple geographic locations such as banks, retail chains, schools, and residential buildings. Powered by the Arcules cloud platform, Milestone Kite is a simple, secure, scalable, and cost-effective cloud video management solution with integrated video analytics and access control functions. It will be available in early 2023.

CONTACT

Milestone Systems A/S Broendby Copenhagen, Denmark Tel.: +45 88 300 300 milestone@milestone.dk www.milestone.dk Since October 2021, Jos Beernink has led Milestone's EMEA business. GIT SECURITY spoke to Jos about our market, the outlook for 2023 and how clever video management can solve challenges in the industry.

GIT SECURITY: You mentioned that Milestone had a great year in the EMEA region with 30 % growth. Is this growth already fuelled by your initiatives to expand beyond security?

Jos Beernink: We have been seeing great numbers in EMEA this year. Our teams all over the region have been working hard to get us in this position. The growth comes from both our core business within security but also within industries like healthcare and hospitality. As we offer more and more industry specific solutions the coming years, these areas will for sure be an important part of our future growth. That being said, we are staying true to our core strength as a video technology software company.

What is your outlook for 2023 regarding business trends and with the given economic background?

Jos Beernink: At Milestone we are very bullish because AI and machine learning open a whole new scale of possibilities, solutions, and integrations in and beyond security. If you look at transportation clients like airports for instance, we see an enormously challenged industry where they struggle to keep operations running while it at the same time is very difficult to attract skilled employees and also being confronted with much higher passenger quantity.

This situation drives a demand for clever VMS security solutions because airports and in many other areas businesses are challenged to do more with less resources. We at Milestone Systems have great solutions to fulfil that market trend. That's why we are being very optimistic for 2023 and the years to come.



Jos Beernink, Vice President EMEA

At MIPS the new initiatives for critical markets were announced. Can you give us more details?

Jos Beernink: So far, we have built our business around security and our core product XProtect. This has been very successful over the last decades, and we will continue to sell Xproduct this way. Going forward, however, we want to know our customers' need even better to deliver value and business outcomes. In the end, we want to sell solutions that add value for specific industries. Based on a deeper understanding of the customers' objectives, needs and challenges within specific industries, Milestone plans to bring proven industry-specific video solutions to healthcare and hospitality over time. Milestone's XProtect open platform video management system (VMS) is the perfect tool for bringing together the best-in-class video and data integrations, video analytics, and cloud solutions to address critical industry needs.

Video analytics is in the heart of many innovations in our industry. What role can Milestone play to enable better video analytics?

Jos Beernink: We must enable our open platform to use the best of breed technologies that are out there. Within AI and analytics, there are some big companies, but also an enormous number of smaller companies available – very specific vertical solutions based on analytics. The real power is that we have an open platform, so our clients in the end can choose the best of breed solutions suiting their specific demands. EVENT PREVIEW

Perimeter Protection 2023

Protection at the Edge Exhibition Already in January

Keeping visitors out is the exact opposite of what the organizers of Perimeter Protection 2023 want to achieve, but it lies at the heart of 130 exhibitors waiting to demonstrate their concepts, products and solutions at the exhibition center in Nuremberg from 17–19 January. And they cover just about every method of trespass prevention, on land and in the air.

Postponed because of the pandemic in 2022, the early start of the biennial event in 2023 has been welcomed by an industry that is eager to make contact again with potential and existing truly international customers again. The event is multi-facetted, with booths, demonstration areas both inside and out and, of course, an accompanying forum giving an opportunity for professional exchange and expert discussion.

The complete palette of both temporary and permanent security measures is on show, from robust and intelligent fencing systems, vehicle access management devices, through access control and crowd control solutions. As well as all types of electronic alarms, external lighting, motion detection and video surveillance, there will also be all shapes and sizes of doors and gates on show, along with fencing to clearly mark out your ground.

Something in the Air

The comparatively 'new' world of aerial threats will receive significant attention at the event through a special area called U.T.SEC - a summit for drones, unmanned technologies and security - that will be integrated into Perimeter Protection 2023. It will present security authorities of critical infrastructure, buildings and other sensitive areas all the latest technology involved Fachforum

ERIMETER

PERIMETER ROTECTION

in this fast-developing niche market of drone detection and defense, as well as the use of drones in security operations.

The specialist forum is being organized together with the Association for Security Technology (VfS), the UAV DACH and Curpas The latter was founded in 2016 and represents the suppliers of unmanned and autonomous systems for use on land, water and in the air.

Getting There

Road, rail and air connections to Nuremberg (Nürnberg) are excellent. Passengers on incoming flights to the Albrecht Dürer International Airport (NUE, EDDN) from many European cities are brought to the city's main railway station by the U2 tram in just twelve minutes. From there, the U1 tram stops eight minutes later immediately outside the exhibition entrance. The A3, A6, A9 and A73 autobahns converge around Nuremberg from all compass points and there are more than enough parking spaces close to the exhibition grounds.

The city is experienced in hosting large exhibitions and you can find all the facilities you need, also with regard to hotel accommodation, on the event's own website at www.perimeter-protection.de. Tickets can be pre-booked here and, before attending the event, you should read the latest information about the necessary vaccinations here or on social media. Although restrictions have been lifted in open spaces, it is still necessary to wear a hygienic mask when traveling on public transport and in taxis.

So it's off to Nuremberg shortly after Christmas for lots of interesting displays and discussions on that perennial subject of perimeter protection. Although the exhibition grounds will be bristling with equipment to keep people out, we are sure that the organizers will actually be very happy to welcome you in.

CONTACT

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Providing the essential link between government, industry, the academic world and the end-user community, the 2022 International Security Expo exhibition and conference, which was co-located with International Cyber Expo 2022, filled the Grand Hall at London Olympia from 27th to 28th September. Thousands of visitors from more than 70 countries poured into London to see the 300 exhibitors. Meanwhile, over 60 packed conference sessions were completed over the two days, many with standing room only. The newly appointed UK Minister of State for Security, the Rt Hon Tom Tugendhat MP, toured the event on the first day.

number of exhibition stands caught our eye that were offering innovative solutions to current problems. How to reduce the vulnerability of public events to malicious vehicle threats by lone actors? Bringing fresh hostile vehicle mitigation (HVM) expertise to ISE, Crowdguard of Altrincham, Cheshire is a specialist in

event and public realm security and safety for the UK and USA. The company protects people and assets with a turnkey service that includes risk assessment, vehicle dynamics analysis, and the supply and installation of certified HVM systems to specification, along with maintenance and servicing of all equipment. There is much talk today about the positive and negative impact of drones on security. The Retford, Nottinghamshire, company Drone Defence provides its CPNI rated AeroEye and AeroSentry products to protect the airspace around critical national infrastructure and other secure areas. It displayed its new Paladyne series of electronic countermeasure drone jammers. These are a man-portable and future-proof system to disrupt the command, video and navigation signals on the majority of commercial drones. Once the drone is detected, the Paladyne E1000MP can be activated to block its control, GPS and video signals, meaning that the drone returns to its start location, lands or drifts harmlessly away. With Paladyne's operational range of a 1 km, if you can see a drone, then you can stop it.

Detection of Explosives, Ergonomic Monitoring and People Screening

GreyScan Australia of Port Melbourne return to ISE with the ETD-100, its fielddeployable, Capillary Zone Electrophoresis (CZE) trace detection system. This is designed to detect homemade explosive compounds that other systems cannot. The company's stand showed this fast evolving ETD-100 inorganic detector, which aims to close the gap in detection capabilities by accurately and reliably identifying trace levels of nitrate, chlorate and perchlorate compounds, as well as other inorganic threat substances which present high risk to secure environments.

Control rooms play such an important part nowadays in security. Winsted of Bromsgrove featured their innovative 'Future-proof Control Room' on their stand shared with technology partners Weytec and Eizo, collaboratively demonstrating how the latest control room should look. Within the feature, Winsted showcased their new ergonomic console - the Vue. A modular, configurable, connectable and adjustable workstation, it combines optimum functionality with clean-line aesthetics. The Winsted Vue is static or height-adjustable, with a choice of open design or storage under single or dual work surface, and multi-operator configurations. The company are happy to provide a helpful free design service and free 3D console design software downloadable from their website.

Vendor Apstec Systems headquartered in Stockholm announced the launch of a new version of its Human Security Radar mobile people screening unit. Version 4 of the innovative HSR system provides high-throughput, low-contact security screening and ensures a seamless security experience for people being screened. It delivers proven and effective functionality in an attractive, smaller and mobile unit which is easy to deploy.

Camera to Go

Elsewhere, Apex Vanguard demonstrated its Hecate ruggedized tactical camera

system - a specialized, IP67-rated multiplatform camera system featuring a wide view day camera, IR night camera and FLIR thermal imaging camera. An all-in-one system, it can be pole-mounted or dogmounted. It is supported by an integrated COFDM microwave transmission module, with all the video and data transmitted to a fully functional and ergonomic handheld receiver unit.

Demonstrating two new product launches, Linev Systems revealed its Proteus range of baggage X-ray security systems. The range is fully equipped with the latest AI features to help detect pyrotechnics, flares and smoke bombs. The company also showcased its Clearpass CI, a revolutionary X-ray scanner designed for smaller spaces. With a footprint of just 0.85 m², the technology provides exceptional mobility and claims the fastest scan acquisition time available on the market. It is available with advanced contraband detection software, designed to detect contraband on or within the human body. By allowing selective area focused screening, it also reduces screening and over-exposure to other parts of the body.

X-ray capabilities were equally the focus of Videray Technologies from Boston, MA in the Product Innovation Theatre, where it announced its new PX Ultra – claimed to be the most powerful handheld backscatter X-ray imager on the market. After nearly three years of development and testing, the PX Ultra uses the first 160 keV X-ray source, enabling operators to see through up to 10 mm of steel. It features the same ergonomic form factor and intuitive software used by the popular PX1, reducing its scatter and leakage measurements by a factor of two.

Online Threats and Better Security Checks on Borders

Canadian defense and security start-up Patagona Technologies of Toronto joined the event to demonstrate its Threatdesk analytics and investigations platform. It provides OSINT analysts with the tools

Suppliers mentioned

www.apstecsystems.com https://apexvanguard.com www.crowdguard.co.uk www.dronedefence.co.uk https://greyscandetection.com www.linevsystems.com www.patagona.ca www.smithsdetection.com https://videray.com www.winsted.com to combat coordinated information operations by state and non-state actors. Equally the system allows analysts to gain deep insights into online threats, such as coordinated influence operations, online radicalization and information security threats by leveraging hundreds of online data sources from news, forums and social media platforms. Once collected, it uses advanced AI methods to identify and respond to coordinated non-authentic behaviors.

Finally, a global leader in threat detection and screening technologies, the Smiths Detection Group, majored on its HCVM X-ray screening system for mobile highenergy inspection. Available as either a mobile cargo vehicle or a trailer, the HCVM system optimizes security checks at airports, ports and borders. Driven from location to location, it requires a minimal footprint and external infrastructure and can be readied for use in less than 30 minutes. A Smiths Detection HCVM XL inspection system assisted in a French Customs discovery of 514kg of cocaine at the Port of Marseilles in January 2022, the largest cocaine seizure ever made at the Port, with a value of some €36 million. The drugs were detected in several containers of a ship coming from Chile.

So, the stands on which we have focused in our review give you an appreciation of the more significant and innovative security technologies that attracted thousands of visitors from around the world to the Grand Hall of the Olympia exhibition center in September 2022. The eagerly awaited 2023 International Security Expo will be held from 26th to 27th September at the same central London venue. By that time, the security landscape in Europe will undoubtedly have changed significantly, and through important exhibitions like ISE we need to keep abreast of the technological solutions available in the marketplace to handle all those changes and challenges.

> Author Oliver Haines

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EVENTS

Back at Full Swing Intersec 2023 in Dubai Presents Integrated Tech for Global Security

While the 2022 edition of Intersec in Dubai was strongly influenced by the Corona pandemic, travel restrictions and uncertainity, the next edition will certainly be bigger and more attractive to visitors. From January 17 to 19, the event held under the patronage of His Highness Sheikh Mansoor bin Mohammed bin Rashid Al Maktoum, will welcome visitors from the Middle East plus international visitors.

The event, supported by the Dubai Police, Dubai Police Academy, Dubai Civil Defence, SIRA and Dubai Municipality, aims to unite the industry and accelerate conversations to explore strategies and source technologies for the challenges faced by global security leaders and professionals.

The exhibition will offer the opportunity to once again gather and reconnect with existing clients and build potential customers. The organisers are reinforcing those ever important business relationships that are the pinnacle of every exhibition. The exhibitions has a focus on five keys:

- Commercial & Perimeter Security is the second largest section of Intersec with 15 of the top 20 exhibitors represented. This section caters to the need of governments and the private sectors, who are increasingly focused on security products and solutions such as access and border control, protective barriers, locks, access control protocols, security guards and many other techniques.
- Homeland Security: With the ongoing support of Dubai Police and Security Industry Regulatory Agency (SIRA), Intersec's Homeland Security & Policing section is dedicated to products

and solutions for Homeland Security, Law Enforcement, Airport and Aviation Security.

- Fire & Rescue: The exhibition offers one of the world's largest gathering of fire and emergency professionals, showcasing the latest firefighting technologies, the best international standards and practices, supported by the Dubai Civil Defence.
- Safety & Health: Safety and well-being at work and in the wider environment have never been so critical. This is now being reflected with the changing and dynamic supply chains where suppliers

of the latest protective clothing, PPE, air quality, ergonomics, occupational hygiene, occupational health, sanitisers, protective flooring - slip and trip, environmental and waste management, workplace safety, cleaning and general sanitisation, safety signage and equipment, staff well-being and regulations are rapidly evolving.

- Cyber Security: The Cybersecurity Lab launched at Intersec 2022 hosted cyber solutions, experts, from national leaders to public & private sector professionals, from cyber connoisseurs to advisors, hackers to responders, and cyber economists to corporate buyers. The Cybersecurity lab is an international village of expertise, best practice and solutions that caters to those working in and managing cyber defence.
- The Content Program: Intersec 2023 brings to you exclusive educational content focusing on the needs, challenges and latest technologies disrupting the industry. Hosted under the theme of "Integrated tech for future-proofing: Protection, Disruption, Sustainability", this 3-day event will feature content for the complete ecosystem of emergency services, security and safety all under one roof.

The extensive development of the show will see the best minds in the industry participate in the content program to discuss the market challenges and opportunities providing a place to benchmark, innovate, collaborate, ideate, and be inspired. Addressing the sector's most vital issues and opportunities, the 3-day content will feature:

 Intersec Security Leaders' Summit (invite-only): Intersec 2023 will host a high-level strategic summit for the leaders and stakeholders of the security industry to collaborate, innovate and actively seek new technologies to meet the rapidly changing needs of the industry. This two-day summit will convene government officials and security leaders across industries to discuss the key themes of government strategies, homeland security & policing, commercial & perimeter security and cutting-edge technologies.

Cybersecurity Seminars: The Intersec Cybersecurity Seminars will feature the latest trends, drivers, challenges and successful case studies across industries that are playing a substantial role in shaping the cybersecurity industry growth. Hear from the government leaders and CSOs and CISOs across the oil & gas industry, BFSI, healthcare & hospitality, energy & utilities at the CPDcertified seminars providing an opportunity for all professionals involved in cybersecurity to learn, network, discuss, and evaluate the best practice approaches and tactics to manage evolving cyber threats.

Intersec conference will offer the complete ecosystem of

emergency services, security and safety all under one roof

- Safety & Health Seminars: The Intersec Safety & Health Seminars taking place at Intersec will help you navigate the latest UAE and other MENA regulatory changes and align with global best practices to deliver a strong health & safety culture suitable for the current environment. These CPD-certified seminars hosted by the government and industry champions will help you stay abreast with current market needs and how to overcome the challenges with regional and global best practices.
- Fire & Rescue Seminars: The Intersec Fire & Rescue Seminars will gather the most prominent fire and emergency service leaders from across the region to talk about the key challenges, opportunities, standards & policies and technology. These CPD-certified seminars will help you learn, network and collaborate with industry peers.

Helping you to be a step ahead and right where the security & safety industry's future takes shape - Intersec's summit, seminars and content features are curated to do just that. With the right mix of international and regional speakers, the event aims to stimulate collaboration between the government and private organisations with unique discussions to focus on providing productive spaces for meaningful and productive learning, in addition to networking and collaboration.

CONTACT

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ACCESS CONTROL

Growth in the Middle East

Three Questions to Bastien Castets, STid's Regional Sales Director Middle East

GIT SECURITY: How does STid's growth in the Middle East compare to the rest of the world?

Bastien Castets: STid is active worldwide and has over 700 clients and partners in 55 countries around the world. In the Middle East, STid's local team has shown tremendous growth: our turnover has increased fivefold in five years, resulting in a CAGR of 40% since 2017. This regional success has led us to open a brand new office in Dubai. This new office enables us to provide the best possible sales and technical support to existing and new customers in the region. We are equipped with a training and demonstration area, centered around our high security solutions for vehicle and people identification.

We are now able to welcome our clients, provide the best possible local training and demonstrate great levels of responsiveness and a proactive attitude to supporting their projects. We have always tried to carefully adapt to the needs and the requirements of our clients throughout the Middle East region. This has already resulted in great installations being deployed.

How do you explain this great international success?

Bastien Castets: Current trends in society are beneficial to the security industry. Companies all over the world and across all industries are faced with increased security threats. STid has been able to establish a solid market position by combining two seemingly contradictory needs: the requirement for flawless security from security departments and the necessity for a seamless user experience by removing identification restraints. With STid, access control becomes instinctive and ensures proper data protection. Our access control solutions are future-proof and can be easily adapted to changing customer needs. In total freedom.

What does "in total freedom" mean?

Bastien Castets: STid promotes open technology and is opposed to so-called "vendor lock-ins". The access control market is anticipating the end of outdated, proprietary solutions. Since the inception of STid, we made the explicit decision not to ever lock our customers into their own security solutions. This is another strong differentiator for STid in this access control market. When you install a new lock at home, you don't hand over a duplicate key to your lock-installer. This should be exactly the same in corporate security. You must be able to operate your security systems autonomous and independent from suppliers, so that you are in total control of your security strategy and have ultimate freedom in choosing the technology and solutions that suit your needs best.

Intersec 2023 | booth S2-F33

Intersec 2023: Spotlight of STid's high security solutions

Make Access Control Instinctive

STid Mobile ID is a solution that simplifies managing and issuing virtual cards by storing them on smartphones. The system can be used in combination with conventional access cards. The system manages physical employee access, the reception of visitors, access to a parking area and it can grant access to any type of service. Access privileges to buildings are based upon corporate user profiles. Administrators can issue, update or revoke thousands of access cards with just one click of the mouse. STid guarantees flawless communication based



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on end-to-end security between the credential and the reader (with Mifare Desfire EV2/EV3 technologies or STid Mobile ID), and also between the reader and the controller/local processing unit while supporting Wiegand, OSDP and SSCP protocols.

OSITE

Best Choice to Secure Parking Access

The Spectre nano is the compact mid-range reader (up to 6 meters reading distance) of STid's Spectre UHF reader portfolio. By offering the best size/performance ratio on the market, it helps to reinforce security levels by supporting identification of both the vehicle and its driver. This solution is made possible by combining UHF RFID with Bluetooth technology. Completely intgrated into the STid Mobile ID ecosystem, the Spectre nano allows



the use of virtual badges for both vehicle and people access. The device is extremely robust (IK10 and IP65) and it has an anti-tamper feature: the security keys are automatically destroyed in the event of attempted vandalism. Spectre nano has recently won the ESX Innovation Award, the Detector International Award and SecurityInfoWatch.com Readers> Choice Award and is on display at Intersec.

CONTACT

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Video Management Software

Vivotek showed its power intelligent video management software, Vast Security Station (VSS), for the first time at this year's Security Essen in Germany. "The VSS is an integral component of our video management solutions. It offers intuitive services and mechanisms to search. monitor, and manage surveillance footage easily, helping customers get the most out of their Vivotek products," said product planning director Louis Liao. The VSS provides a platform for all the Al imaginable, and for searching for and connecting to various network cameras while providing a data shield to ensure information security. Solutions can also be tweaked to meet the distinct needs of different users. When running attribute searches, the system converts metadata into quantifiable targets for faster people/vehicle attribute identification, including gender, age (adult/child), apparel color (upper/lower), and accessories (hat/backpack) or vehicle type (car/ truck/scooters/bicycle) and color.

www.vivotek.com

Behavioral Analytics and VMS Solution Integrated

Viisights, a developer of innovative behavioral recognition systems for real-time video intelligence, and Qognify, a provider of advanced video management systems, have partnered to offer a seamlessly integrated solution that automates event detection and analysis. This dramatically increases situational awareness by employing artificial intelligence to autonomously detect, analyze, and understand situations and events as they are unfolding. The behavioral analytics leverage the latest advancements in imaging technology and provide actionable intelligence to minimize liabilities and prevent incidents from escalating. The behavioral analytics employ artificial intelligence to autonomously detect, analyse, and understand actions and events, based on deep neural networks capable of analyzing and defining specific activities using video streams from conventional security cameras.

www.viisights.com

GIT SECURITY AWARD Winners 2022

Readers, market participants, fans and partners have decided who the next winners of the GIT SECURITY AWARDS should be. We are pleased to present these winners of the respective categories. At the time, the award was the first of its kind in the market for security and thus a trendsetter – it has now been awarded to particularly innovative, economical or formative products, solutions or services since 2005. So the GIT SECURITY AWARD is one of the most coveted prizes in the world of safety and security. The procedure has proven itself: until 31 March of each year, companies can register for the award on www.security-award.com. A neutral jury then nominates the finalists in each category. In the last step, the community then votes for its favourites. Important: Employees are not allowed to vote for their own product. The editorial team of GIT SECURITY congratulates the winners.

Category A · Machine & Plant Safety



SICK: deTec4 Smart Box Detection Intelligent access protection

deTec4 Smart Box Detection is the first solution of its kind for pattern recognition. It can detect objects with a rectangular contour as they enter the protective field of the safety light curtain. Evaluation of the light beams interrupted in the process ensures reliable differentiation between human and material. The safety solution is characterized by a high level of integration friendliness and requires neither additional signals from automation systems nor muting sensors during operation. This saves programming, mounting, and wiring efforts. If objects of different heights and lengths are to be detected, they do not have to be taught in additionally, nor does the configuration have to be adapted.

K.A. Schmersal: AZM150

Electromechanical Solenoid Interlock

The electromechanical solenoid interlock AZM150 has a locking force of Fzh 1,500 N and is suitable to protect persons and processes. Due to its slim, space-saving design (WxHxD: 40 x 204 x 48 mm), the AZM150 is particularly suitable for smaller machines, but also for packaging machines and machine tools. The solenoid interlock AZM150 can be combined with three different actuators for different installation situations. The real innovation, however, is the rotatable actuator head, which can be locked by simply putting on the cover



instead of by screwing it in place. The rotatable actuator head with its two insertion slots enables various mounting positions and approach options.

Leuze electronic: FBPS 600i Safety Barcode Positioning System

Whereas two sensors with two diverse technologies were previously required for safe position detection, this is much easier with the world's first Safety Barcode Positioning System FBPS 600i: Now only one certified device with the highest performance level PL e is connected to a safe evaluation unit – e.g. a frequency



inverter - via two SSI interfaces. This makes it extremely easy to implement safety functions and reduces the effort required for installation and service. The devices show their strengths particularly in the fast movements of stacker cranes: the very short error reaction time of only 10 ms allows speed curves and handling performance to be optimized.

Category B • Occupational Safety and Health & Explosion Protection



Denios SE: Denios Connect Smart Product Service System

Know immediately when something happens in the hazardous materials warehouse, around the clock: Denios Connect makes it possible. The solution offers wireless networking of safety-relevant sensors baswed on narrowband IoT technology in conjunction with a cloud-based web application for leakage management and condition monitoring in a service platform. This allows faults or leaks to be detected in real time, enabling an immediate response. Property damage and business interruptions can be effectively prevented in this way. At the same time, the status data of all connect products is seamlessly documented in the Denios Cloud and can be used, for example, as a report for audit purposes.



Haix: Connexis Safety Safety Shoe

The Connexis Safety indoor safety shoe not only features an ultra-light nano-carbon protective toe cap and anti-slip sole (S1). In addition, a tape runs through the shoe, which exerts pressure on the tarsus and permanently stimulates the fasciae in the sole of the foot. This stimulates muscles and

blood flow and reduces negative effects on the musculoskeletal system. In addition, it is adapted to the natural shape of the foot thanks to its special design. This gives the feet more space and stability, supports their natural functioning, prevents fatigue malpositions. A study by the Technical University of Munich has also proven the corresponding positive effect.

Dräger: X-node

Measurement and Analysis System

The wireless Dräger X-node is a measurement and analysis system for continuously monitoring of gas concentrations using industrially proven Dräger sensors. It simultaneously measures the ambient temperature, humidity and pressure. The measured values can be transferred to a database in real time via a LoRa network and to a smartphone via Bluetooth. The integrated battery supplies the X-node with power for up to 12 months. The Dräger sensors are characterised by a fast response time, high accuracy, great stability and long service life. The X-node can be used flexibly and can avoid potential health hazards, optimize production processes and conserve resources.



Category C • Video Security & Video Management



Dallmeier: Domera 6000 Series PTRZ Dome Kamera

The Domera series offers a combination of the following features that is currently unique on the market: Image capture in 4 and 8 MP and AI-based edge analysis in the highest quality even in the most demanding lighting conditions. An innovative lighting concept that eliminates the lighting problems of traditional dome cameras and finally, with the Dallmeier RPoD, a remotely controllable three-axis control (PTRZ) of the lens for quick installation and adaptation to changing environments. The modular Domera housing and mounting system covers a large part of all conceivable indoor and outdoor video applications and enables up to 360 individual products to be created with only 18 components. The combination of AI edge analysis, adaptive, external (outside the bubble) IR / LED lighting and three-axis control avoids stray light caused by wear and tear or reflective walls.

i-PRO: WV-S8574L

Multi-Sensor Camera with AI Engine The WV-S8574L multi-sensor camera is equipped with 4 AI sensors in 4K resolution. The AI functionality is integrated

directly in the camera via the built-in Deep Learning AI processor which offers, in addition to the pre-installed

free applications, also the possibility to integrate 3rd party applications and to install up to 4 applications separately on the 4 sensors. Those can be combined with the integrated noise detection. The cameras height is only 9cm. Views from 180 degrees to 360 degrees are possible. For use in dark environments, it has IR LEDs with a range of up to 40 metres.

Bosch Building Technologies: Flexidome IP 8000i - X series **Outdoor Dome Camera with PTRZ Function**

The X series cameras deliver enhanced image quality for low-light scenes and fastmoving objects with next-level HDR X and starlight X technologies. The combination of starlight X and HDR X technology with builtin AI enables the X series models to elevate relevant data capture to support informed decisions, in low-light situations or applications that require fast-moving object capture.



The series also adds new indoor models. These fixed dome cameras also offer innovative remote configuration and commissioning. Installers can adjust the pan, tilt, roll, and zoom remotely to set the required field of view without touching the camera or lens and without a ladder or lift.

Category D · Access Control & Intruder Alarm

Ksenia: ergo-X

Touchscreen Keypad ergo-x is designed and developed by Ksenia Security. It's a touchscreen keypad for indoor or outdoor installations with weatherproof protection grade IP65. It is de-

signed to resist any weather condition including pouring rain. Its built-in membrane keys are hidden when the keypad is in stand-by mode and become visible only when somebo-

dy approaches it thanks to the proximity sensor on board. ergo-X keyboard integrates an RFID reader to communicate with Ksenia mini-tags and to trigger specific scenarios. So, if the tag gets close to the reader, some actions are triggered on the system. When a command is successfully performed, the built-in multicolor RGB LED shows the system status and confirms the executed scenario in this way; additionally, the integrated buzzer can also help with the acoustic notification of arming, disarming and partial arming home automation scenarios, to assist the visually impaired users.

Ajax Systems: MotionCam Outdoor Wireless Motion Detector

The MotionCam Outdoor (MCO) features two PIR sensors and a proprietary digital algorithm to filter thermal interferences and triggering caused by pets. The two-way radio protocol based on TDMA has an alarm transmission in 0.15 seconds, RF hopping and jamming detection. Visual verification. A series of up to 5 photos follows the motion alarm and displays in the Ajax app. A built-in HDR camera with a wide-angle lens takes crisp pictures in any weather, and a powerful IR backlight activates if triggered in low light. MCO operates for up to 3 years from a pre-installed battery and can be installed at a distance of up to 1,700 meters from a hub. With the certification to EN 50131 it meets Grade 2 requirements.



Idemia: MorphoWave Biometric Access Control

MorphoWave is a biometric reader for physical access control. It scans and verifies four fingerprints in less than one second through a quick simple and fully touchless hand movement. Therefore it is very accurate, quick, easy to use and fully hygienic. It is also fully GDPR compliant and can work in 2-factor authentication mode combined with a mobile phone (NFC



or BLE) or an access card. MorphoWave features a patented optical set and structured lighting. This enables a unique throughput of up to 60 users per minute. With the biometric algorithms, MorphoWave works perfectly with dry, wet, dirty or damaged fingers, with linear performance level up to 100,000 users in 1:n verification mode depending on device versions.

Category E • Building Safety, Perimeter & Fire Protection



Dahua: TiOC 2.0 Customizable Security Alarm System

The Dahua TiOC 2.0 camera offers innovative features that allow users to customize their monitoring systems based on their own preferences. Its Smart Dual Illuminators can help reduce light pollution during the night, while its Voice-Catcher technology can significantly decrease background noise. It is equipped with F1.0 large aperture and optical path compensation technology that can capture brighter and clearer image even under low-light conditions. What's more, it offers intelligent AI functions that can help ease surveillance operation. It also allows integration with traditional alarm systems.

Mobotix: M16

VdS Fire Protection Thermal Camera

Mobotix thermal cameras detect fire sources reliably and at a very early stage by detecting critical temperature thresholds. And it does so even before a fire starts from a distance of up to 60 meters. It warns, alerts and initiates measures so that the spread of fire can be effectively fought or, at best, prevented. The Mobotix M16 VdS Thermal Camera has been developed for use in environments with an increased fire risk.



Securiton: SecuriDrone Companion Portable Drone Detection



SecuriDrone Companion is a high-performance drone detection system that can easily be taken as hand luggage. The Companion is ready for use after a few seconds, recognizes almost all types of drones within a radius of up to 2 km and reports them reliably and immediately - even before take-off. In addition to the drone type and position of the drone, its electronic identification and the whereabouts of the pilot are also transmitted. Other predefined people can also be alerted immediately and automatically. The system can not only be used anywhere, but is also very easy to use and available via an app. Another bonus is the recording function of the flight data.

Category F · Special Category: Sustainability

Salto: CO₂ Neutrality

Salto Achieves Carbon neutrality Salto Systems has achieved carbon neutrality thanks to its participation in two innovative projects with a triple-transformative effect on the economy, society and nature to achieve Salto's goal: for its operations to have zero impact on the climate. In total, the 1,721 tons of CO₂ generated in 2020 were offset in 2021 through two projects: River Chinchiná Forestry Project, Colombia (Fundación Ecodes and CeroCO₂): Reforestation and protection of hydrographic basins in the Andes, and Apadrina un Olivo (Sponsor an Olive Tree) in Teruel, Spain, which fights to recover



olive groves, as well as against depopulation and the abandonment of olive groves in Spain. The environmental policies implemented by Salto reduce the environmental impact of its operations. 100% of the electricity used in the factory is sustainable and comes from renewable sources. 25% of the electrical energy comes from the sun. Salto has installed 640 solar panels in its factory, the first large-scale solar power installation in its global network.



Fristads: High Vis Green High Visibility Collection

High Vis Green by Fristads is the world's first sustainably produced high visibility collection. All products in the collection always use the most sustainable options from material (recycled polyester & organic cotton), design (long life) and production (recycling of production waste) to delivery (sea and land transport). All environmental impacts are objectively tracked using an Environmental Product Declaration (EPD) at the

product level. The key to comfort is stretch, so pants and jackets are very comfortable due to the strategic use of stretch, either as stretch panels or full-stretch material. The GPLU products in the collection are also approved for industrial laundering.

Hanwha Techwin: Traffic Management Cutting Carbon Emissions Using Intelligent Video-Based Solutions

Hanwha Techwin's traffic management solutions combine video surveillance and intelligent video analytics that can help minimise traffic congestion and reduce carbon emissions as a result. The cameras will detect and classify different vehicle categories and models, enabling operators to allow certain vehicular traffic through anarea, whilst limiting others. For instance, trucks could be restricted from entering residential streets, or roads near a school during drop-off and pick-up times. This



helps keep traffic on the move and protects vulnerable residents and children from exhaust fumes. Likewise, operators can monitor road usage and redirect traffic to alternative routes if congestion is building up, lowering emissions as a result. VIRTUAL CONFERENCE ON THE TOPIC:

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Jürgen Wittmann, Director Corporate Security at Robert Bosch GmbH, President of ASW Baden Wuerttemberg

Julia Vincke, Vice President Security at the BASF Group



Andreas Osternig, Global Head of Corporate Security (CSO) at Daimler Truck AG, Member of the Board of Directors of ASW-BW

WILEY



Dr. Thomas Höfling from Award winner SICK

Schmersal with a place

on the podium

Where our lea journ

take ye

hternehmen ir und itäten

> Michael Strzyz explains details of the winning product from SICK

> > Stephan Frick from

Schmersal at the

Nuremberg SPS

GIT CHERHEI AWARD WINNER

GIT SICHERHEIT SECURITY AWARD AWARD

SICHERHEIT SECURITY AWARD AWARD

URITY SICHERHEIT S VARD AWARD

GIT GEC SICHERHEIT SEC AWARD AV

Dr. Timo Gimbel hands over the cups and certificates as one of the presenters – at SPS show in Nuremberg

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GIT

Martin Tippmann (m.) are delighted with the win for Leuze

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happy about the award at the Security show in Essen, Germany

.

Raffaele di Crosta, CEO at Ksenia is celebrating the win with its team.





(2nd and 3rd from left), winning the award is something very special



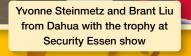
the award on behalf of Bosch at Light + Building



Idemia, is happy about his podium finish

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11



ILE



Maximilian Kundert receives the trophy for Mobotix at Light + Building in Intersec

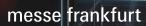






Hanwha is a winner in the sustainability category, too – here with Stefan Dörenbach (center)

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The Bucharest Transport Company (STB) provides public transit for Romania's capital city and the surrounding area. They operate a range of tram, bus and trolleybus services – around 2,000 vehicles in total – from several depots and terminals. To manage time, attendance and ID for a staff of approximately 11,000 people, they chose an Assa Abloy Incedo access control system.



ACCESS CONTROL

Everything on Time Access Control System Also Covers Time and Attendance

Their solution chosen by STB needed to be easy to deploy to multiple locations: robust, secure credential readers would be placed at all convenient staff timekeeping points. "The most difficult part was to find a reliable, integrated software and hardware solution that can monitor time and attendance for 11,000 employees in many locations," explains STB's Dan Horhoianu. The answer was an Incedo Business system with EAC-M50 controllers and R10 iCLASS readers.

The controllers are managed by Incedo Plus software across multiple STB premises. A fully documented API and technical support helped to streamline the process of integrating Incedo with the PrimeTime-Keeping time-and-attendance software package. The Incedo platform is designed to connect all kinds of business software and hardware within a single system. 'Plus' is the ecosystem's management option for interoperating with third-party software: it facilitates integration with multiple devices and services to help organizations do even more from a single interface.

Connecting Up

"Incedo hardware has integrated smoothly with the time and attendance software,

Incedo Business platform

Assa Abloy's Incedo platform has three system management options – Lite, Plus and Cloud – designed to give every customer a scalable solution focused on their security needs that is simple to install and completely flexible. It can be scaled up on demand or upgraded whenever security demands change at a location.

An Incedo solution is also agile enough to adapt to the latest technological changes, intuitively combining secure, connected access points with intelligent identification technologies, for a solution that is both future thinking and future-proofed.

delivering the best solution for our staff," adds Mr Horhoianu. "It is already deployed as an integrated access control system at all kinds of premises across Europe," adds Joachim Mahlstedt, commercial director DAS at Assa Abloy Opening Solutions. "From one interface, organizations can manage readers alongside battery-powered Aperio wireless locks, Pulse locks powered by energy-harvesting technology and more. Its integration-ready software also readily adapts to connecting other key business functions – including attendance and ID."

Incedo is modular by design: STB can scale their system, in either direction, on demand. Hardware and components were fast and straightforward for STB's installer to fit, and they can easily choose to extend the reach of their Incedo system at a later date – or add access control at anytime.

CONTACT

Assa Abloy Opening Solutions EMEIA Tel.: +49 8106 2970 thomas.schulz@assaabloy.com www.assaabloy.com



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Ksenia Security hybrid lares 4.0 IoT platform implements a SIP client in its ergo-T pro touch-screen keypad, for standard audio-video communication, in order to combine it with 3rd-party IP Video Intercom "door stations"; in this way ergo-T pro touch-screen keypad will operate as "indoor monitor". How it works on LAN network: when the call button on the door station is pressed, it makes a SIP one way audio call to the ergo-T pro; upon answering, a two-ways RTSP (audio/video) communication is established with the possibility to trigger up to two monostable outputs (e.g. Gate and Light).











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ACCESS CONTROL

Innovation Meets Design

Südmetall Has Introduced a New Range of Electronic Locks

Slidmetal

Südmetall Schließsysteme Leipzig is a young and dynamic company founded in 2013 as a part of the Almar Südmetall Group. The company develops and manufactures electromechanical locks 'Made in Germany'. An experienced and motivated team works intensively together with highly qualified partners at the headquarters in Leipzig on smart electronic access management solutions. Südmetall strives to constantly optimize and improve its own products because needs change over time. Their aim is to make people's lives easier, more convenient, and safer.

Greating a product that does not compromise on design, that sets a new benchmark in the placement of electronics in terms of product safety, is compatible with the new trend of Bluetooth connectivity and opening, and creates new standards in sustainability; these were the aims that the developers of Südmetall Group were striving for.

The new ÜLock Novus solution was presented with great pride at the Security Essen 2022 exhibition. The name Novus was chosen precisely because of the many new possibilities (innovation aspects) that the market can be offered. The product is a new development, introduced and based on the current ÜLock Battery and Inductive wireless security lock, a self-locking panic lock with a 20mm latch bolt as well as wireless and Bluetooth connectivity options.

The RFID reader unit of the ÜLock Novus is integrated into the key escutcheon in the smallest possible space, which means that the color and design of the handle models can be freely selected, and the mechanical profile cylinder for emergency opening can still be used - design requirements no longer have to give way to functional solutions.

Security at the door has always been a basic need for people, so Südmetall has made it its mission to integrate all the electronics of access control into the lock and has skillfully implemented this. All sensitive components are contained in the lock case and are protected by both the door and the lock. On the outside of the key rosette there is only the reader unit that forwards the card data to the evaluation unit in the lock and cannot be manipulated.

Bluetooth in combination with smartphone apps is gaining ground on the European market. Südmetall is following this trend and has equipped the new ÜLock Novus with a Bluetooth module. Both control via smartphone and specific variants for OEM customers can be realized with the help of this interface.

Sustainable Building

Sustainable building and running costs are topics that every builder or specialist planner has to deal with sooner or later. Südmetall has achieved a perfect symbiosis of both aspects with the ÜLock Novus. On the one hand, the new solution is very simple to retrofit, and on the other hand no additional drilling, milling or holes are required for installation. Batteries, however, are skillfully integrated in the lock case, invisible to the user, and can be replaced via the lock forend, so there are no cables or transitions to be made. However, the ÜLock Novus has also been available as an inductive version since the first series onwards and puts an end to annoying battery replacement because the batteries are constantly charged from the striking plate into the lock via induction. Considering how many batteries have to be replaced annually for access control, this product is a true game-changer for sustainable building in the future.

ÜManagement 2.0 stands for a software platform that is easy to use yet versatile and consistent, and the administration is carried out uniformly for all doors. There is the option to integrate the ÜLock Novus into the customer's system for suppliers who have their own platform.

Inductive Multipoint Lock

The ÜLock Inductive lock is the first inductive multi-point lock on the world market. In addition to all current approvals, it has a 5-point locking system and two different I/O modules for communication with intercoms, access control and other systems. Feedback messages can also be easily sent to the respective system via an active radio connection. The inductive charging and the radio connection make wiring within the door leaf unnecessary. A command can be given to engage the outside handle with the ÜLock multi-point either briefly or, for main entrance doors, for a longer period of time. In addition to the inductive variant, the lock is of course also available as a conventional wired variant with all feedback signals from the lock.

The next highlight at the Security Essen exhibition was unveiled in the ÜTopic area: a simple, rechargeable smart lock for existing doors. Through constant further development of the large range of accessories,



The color and design of the Novus handle models can be freely selected

such as keypads, fingerprint scanners, keypad combinations, hand transmitters, and interfaces for the small Smartlock, the Bridge and the Bluetooth relay have now also been introduced.

In addition to the Bluetooth connection directly from the smartphone to the ÜTopic, the Smartlock can now also be activated remotely via a Wi-Fi connection, and therefore remotely via the cloud. This creates many new capabilities, with the advantage that it can also be combined with cloud integrators in the future. The ÜTopic product range has also been expanded by a Bluetooth relay. This can also be used to open the ÜTopic Smartlock and a garage door via a Bluetooth relay, for example using an app. Many doors and gates can then be controlled via this app, and both options can be enhanced with a batteryoperated keypad and a finger scanner.

CONTACT

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POWERING EDUCATIO

INTERVIEW

How Does the Door Know?

An Interview with Leo Levit, Chairman of the Onvif Steering Committee About Interoperability of Onvif Profiles

GIT SECURITY took the chance to meet Leo Levit in person at the Security Essen show in September and to ask him about the recent developments with Onvif and why standardizing metadata is important for the future of video analytics.

GIT SECURITY: Who are Onvif's target groups?

Leo Levit: From our perspective, Onvif has three main groups that benefit from our work: Firstly, the device manufacturers and vendors of security cameras, sensors, radars, and VMS etc. Those are the ones who can use and implement the specifications that Onvif provides. The second group is system integrators: these are the ones who take the products from the previous group, put them together and build the systems for end users. For them, Onvif conformance is a matter of saving money, because through interoperability of providers, integration is accomplished. And the third group are end users: That's the group that really benefits from their own investment in Onvif conformant products. They invest in something that we have designed for them to be future-proof. When they decide to go with another vendor later in the process, they are not locked into a specific ecosystem or technology.

What is new in terms of specifications?

Leo Levit: To facilitate those ecosystems, Onvif addressed several things over the past couple of years. For the device manufacturers and those who worked with the specifications, we moved our specifications onto open source. It is now open to work with and contribute, which boosted the pace of innovation. For example, once something wrong with a specification was discovered, the process to get it right is extremely short and that is why open source is a great benefit for the organizations involved. When it comes to the actual industry we released a couple of profiles: Profile M and Profile D.

Profile M supports analytics configuration and information query for metadata, as well as filtering and streaming of metadata. It has interfaces for generic object classification, and specified metadata for geolocation, vehicle, license plate, human face and human body. If conformant products have native support for features, such as media profile management, video streaming, adding images in metadata streams, event handling or rule configuration, then Profile M interfaces for those features must also be supported. And if conformant products support analytics for object counting (e.g. for people, vehicles), license plate recognition or facial recognition, or MQTT (Message Queuing Telemetry Transport) protocol used by IoT (Internet of Things) systems, then there should also be Profile M event handling interfaces for those functions.

Profile D is for access control peripherals: Card readers, locks etc. A Profile D peripheral device captures input credential identifiers and passes them onto a securely located Profile D client, such as an access control unit or management software. The client, which stores access rules, schedules and credentials, can then take the access decision and send a command back to the peripheral device to grant or deny access, display a message or request additional input such as a PIN code.

◄ Leo Levit, Chairman of the Onvif steering committee, and Lisa Holland, Deputy Editor in Chief at GIT SECURITY, at the Security Essen show in September 2022

How much interconnection between profiles is there?

Leo Levit: The way we build our use cases is that profiles can work together and enable different use cases to come together. For instance, if we take Profile M and want to transfer metadata, we can imagine a situation where visitors are using their mobile phone with a QR code that they got from the company they are visiting and they are showing the QR code to the camera. The camera transfers the QR code using Profile M and responds back to the lock which is Profile D conformant. So, the whole use case is now facilitated by Onvif specifications.

Individually, each profile is very defined, but they are built in a way to work with each other giving them a higher interoperability.

What is the biggest struggle at the moment?

Leo Levit: There are some trends in the market on the rise, such as AI analytics. So we need to make sure to facilitate the

connectivity when it comes to the models used by neural networks. And we have another trend that's very visible here at the show in Essen: it's the cloud. How do we work with the security in the cloud? Do we need a standardized way of communication within devices in the cloud or different cloud components? Those questions are quite difficult to answer! This is what we are trying to address at the moment and to discuss how we can help this industry to build and continue to build systems with interoperability in mind even if we are moving to a slightly different domain. Today, we are a device- and client-centric industry, but the whole industry is starting to move towards the cloud or adding cloud components to improve the flexibility of systems. So we need to really understand how we tackle that challenge.

How do Onvif members engage in the development and the processes?

Leo Levit: The whole organization is member-driven. In general, there are several companies that contribute more than others, but it is completely by choice. If there is an issue that a specific member has that they believe the whole industry will benefit from solving, they will bring it to Onvif and they will find a way to col-

When they combine intelligence

with responsibility.

laborate with other companies to create a specification or a profile. Different companies engage in different ways in different questions and it is all driven by their own agenda for the market. If, for example, they believe the cloud is absolutely the way to go forward, they are going to contribute to the developments.

What else is there within Onvif apart from specifications and profiles?

Leo Levit: Onvif is not only about writing specifications. We also host a big database with all the devices that are verified and tested that conform to the profiles. It is the accurate source of information, if you have questions about conformance for a specific product. It can be accessed freely on our website.

Another thing which is very important: The conformance process and what it means. It is a self-certification process where you verify your product against a specific set of Onvif-specified features.

CONTACT

BOSCH

Onvif San Ramon, California USA Tel.: +1 928 395 6773 www.onvif.org



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Multi-Sensor Cameras

- 1. For what purpose are multi-sensor cameras best used and what advantages do they offer?
- 2. Which model out of your offering shows the best performance?
- 3. Is it a challenge to run video analytics on a multi-sensor device?



Edwin Roobol Director Marketing EMEA www.axis.com

1. At Axis we offer two different types of multisensor cameras. Our multi-directional Axis P37and P47-Series and our panoramic multi-sensors, represented by Axis P38- and Q38-Series. The first comes in 2- or 4-sensors that can be individually positioned into a direction of choice and can cover up to 360 degrees. The second type exists out of three or four sensors that are seamlessly stitched together into one 180-degree horizontal view for complete situational awareness. The big advantage of these types of cameras is that they can cover wide areas in excellent detail. They could be a good alternative to single-senor cameras as both product types come with the big advantage that they require only one license, one cable, and one IP address which can substantially lower costs in an installation.

2. It is tough to name just one model as every camera has been built for a specific purpose or use case. Some customers want high resolution, like our 5-megapixel Axis P3719-PLE and Axis P4707-PLVE camera models, others value motorized positioning and high pixel density like on our Axis Q3819-PVE, versus a non-motorized Axis P38-Series. Therefore, every camera model is designed based on a customer's needs and values. Providing options is one aspect, but for us most important is that our

products are made to last, are cybersecure and be as low maintenance as possible for the customer. No matter which multi-sensor product is chosen, the customer knows it can handle the challenging conditions it will be placed in and have ample support both from a warranty and firmware perspective.

3. A camera's primary goal is creating scene awareness and analytics can be a great complement to this. For the well-functioning of analytics, image quality under different circumstances is important. This, being one of Axis' strongholds, caused us to optimize our own System on a Chip (SoC) including a Deep Learning Processing Unit, Artpec-8, for strong analytic performance without image compromise. Many of our new products, from multi-direction to panoramic multi-sensor, are being developed with our Artpec-8 chip as we speak. The first great results we can already see on our new Axis P47-Series, which represent dual sensor cameras, with analytics on both sensors. And soon more products will follow. That said, multi-sensor cameras are often more complex in design than their singlesensor counter parts and therefore take more time in development with regard to analytic features and the right balance of performance.



Kay Chan Product Manager Vivotek EMEA

1. Our camera model MA9322-EHTVL offers comprehensive video coverage from a single mount point. It captures every angle for comprehensive video coverage from a single IP address, helping to reduce the amount of cameras needed and saving on installation time and costs. For high quality unlimited coverage the camera features four independent 5 MP CMOS Sensors with IR illuminators. This camera can provide the most flexibility in surveillance monitoring. Each sensor utilizes a 3.7 to 7.7 mm motorized focus lens and 3-axis design along a circular track to enable full 360° coverage. By adding IR illumination up to 30 meters, no matter day or night, light or dark, it always provides complete video security.

2. The FD9391-EHTV-v2 is a newly revamped, outdoor fixed dome network camera that delivers 3840 x 2160 (4 K/8 MP) resolution at up to 30 fps. This camera features a built-in microphone, I/O functionality, and VIVOTEK SNV, WDR Pro, and AI-based Smart IR III technology to present the clearest image quality in both low light and high contrast environments.

It comes equipped with built-in cybersecurity capabilities, and AI-powered video analytics is able to differentiate type & colour of vehicle as well as people attributes. Its housing is IP66, IP67, IK10+, and NEMA 4X rated, and operational in temperatures ranging from -50 °C to 60 °C (-58 °F to 140 °F), making it ideal for any outdoor surveillance situation.

3. Yes, to some extent, it requires extensive experience in the surveillance field and resulting vast image databases to develop a neural-network powered detection engine for the human form and vehicle type. Vivotek's deep learning AI engine offers advanced accuracy in people and vehicle detection compared with traditional rule-based designs. This helps reduce false alarms, as well as minimize the time and effort needed for setting up camera configuration.

1. Multi-sensor cameras typically offer the capabilities of two, three or even four surveillance cameras in a single housing, offering cost savings as there is less cabling and mounting hardware required than if four cameras were used to do the same job. And, as they only have a single IP connection, only one VMS licence is required, and fewer network switch ports are needed resulting in energy savings. Each has a distinct role in an application: two channel multi-directional cameras are ideal for monitoring adjacent areas, for example stairways or L-shaped spaces, while three channel cameras help eliminate blind spots. Four sensor cameras offer a complete 360-degree view without any blind spots.

2. Best performance can be hard to quantify, as it depends on the specific application for the camera. However, life can be made much easier for installers if models equipped with motorised PTRZ gimbals are specified. These will reduce on-site times as they enable engineers to remotely pan, tilt, rotate and zoom the lens' positions in order to set the camera's field of view. It also means installers can install the camera even during darker hours of the day and then set up the field of view later in daylight. Therefore, the installation of PTRZ cameras takes less effort and less labour than a standard camera. Hanwha Techwin recently enhanced its premium Wisenet P series with the addition of three new PTRZ 4-channel, multi-sensor cameras.

The 8 MP Wisenet PNM-9084QZ features motorised varifocal lenses for precise control of focal length, angle of view and zoom of each of its sensors, as do the 8 MP PNM-9084RQZ and 20 MP PNM-9085RQZ, which are also equipped with built-in smart IR illumination for each sensor. This illuminates objects at a distance of up to 30 m by focusing the beam in line with zoom.

3. Our three new 4-channel multi-sensor cameras effortlessly deliver built-in Intelligent Video Analytics (IVA), including Tampering, Loitering, Directional Detection, Defocus Detection, Fog Detection, Virtual Line, Enter/Exit, Appear/Disappear, Audio Detection, Face Detection and Motion Detection. Our panoramic multi-sensor cameras include AI object tracking in the stitched image, allowing users to track across the images of all four physical sensors.

For AI to work, sufficient processing power and memory are essential. The application and user interface also need to be good enough to help users apply the right AI applications on the right channel and get effectively notified about an AI event. In addition, integrating with the leading VMS solutions to allow a forensic search on any of the multi-sensor channels is a must-have. Finally, it also helps if the multi-sensor camera supports PTRZ: this ensures the best field of view and angle is set and helps deliver the best forensic images for AI to work with.



Uri Guterman Head of Product & Marketing, Hanwha Techwin Europe www.hanwha-security.eu

1. Multi-Sensor cameras are best used for environments that require a wide range of visibility, such as street crossings, shopping malls, parking lots or airports. Not only do multi-sensor models cover up to 360° of vision, but also eliminate blind spots compared to several individual cameras. As one single multi-sensor camera basically includes four cameras in one, the number of cameras needed for projects is reduced massively. Thanks to the slim design – the world's thinnest – i-PRO Multi-Sensor models blend in seamlessly into any surrounding and fit perfectly into the indoor environment, basically as an advanced fisheye camera. In addition, our cameras are designed with a special hook structure which makes the installation quick and easy. All of the above aspects do not only save time, but also money.

2. Our best performing Multi-Sensor model is our GIT SECURITY AWARD 2023 winner WV-S8574L, equipped with four sensors in 4 K resolution. The AI functionality is integrated directly in the camera via the built-in Deep Learning AI processor which offers, in addition to the pre-installed free applications, also the possibility to integrate 3rd party applications – with all sensors able to be configured individually. For use in dark environ-

ments, the WV-S8574L has IR LEDs. In addition, the camera is fully NDAA compliant and FIPS 140-2 Level 3 certified. The WV-S8574L is part of our recently launched Multi-Sensor Range, 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.

3. All i-PRO Multi-Sensor models are designed for edge computing and are equipped with a powerful built in AI processor in line with our mission to make AI the standard in the security industry. This allows video and image data to be processed and analysed on the cameras themselves and eliminates the need for additional server infrastructure and reduces the load on the network. Our AI-capable cameras classify the image data and then only pass the metadata via the Active Guard Plug-in on to the Video Management System. To make best use of the metadata that is generated, our multi-sensor cameras are provided with a one cable only connection and require only one VMS license. Active Guard is already supported by leading VMS providers, such as Genetec and Milestone.



Wanda Nijholt Manager, Marketing & Communications i-PRO EMEA & APAC

https://i-pro.com/eu/en/ surveillance

SECURITY



Hundt Huang Product Manager at Hikvision

www.hikvision.com

1. Multi-sensor cameras are best used for applications that demand broader coverage, where both panoramas and detailed, zoomed-in views of the same large site are needed simultaneously, for example, parking spaces, squares, stadiums, and other outdoor areas. As these cameras have multiple lenses built into one camera body, they can reduce the total number of cameras required, helping minimize both cost and time spent on installation and maintenance. Integrate two or more imaging lenses into a single camera, there is only one IP channel to manage, and only one license is needed on the video management software platform. Besides, the smart-linkage between multiple sensors and lenses makes the configuration and management of multi-sensor cameras easier, compared to a system with several single-sensor cameras.

2. That would be the Hikvision 8-inch TandemVu PTZ DS-2SF8C442MXS-DL(14F1)(P3). It combines a 4MP fixed-bullet camera with ColorVu technology and a 4MP PTZ camera with DarkFighter technology. This means that the camera can monitor large areas and zoom in on specific security incidents while maintaining focus on both 'viewpoints' simultaneously.

Featuring Hikvision's signature ColorVu and DarkFighter technologies, the cameras are able to provide high-quality, full-color video 24/7, even in extreme low light conditions. The camera also supports IP67 and IK10, which guarantees good water and vandal protection in various scenes.

3. It is indeed. Firstly, data fusion and processing from multiple sensors require higher performance in both hardware and software, compared to conventional single-sensor cameras. Secondly, for multi-sensor fusion, it is essential to perform the online calibration of sensors to accurately recognize changes in sensor pose or changes in the positions of the sensors. Thirdly, the intelligent and persistent analytics working within the smart linkage between different lenses is very complicated and challenging.

Pushing Real-Time Identification and Threat Detection to the Edge

Oosto's Vision AI platform optimizes its neural networks for smart cameras, near-edge devices and access control systems. The company has issued the latest release of its AI software, which includes significant video analytics enhancements for video surveillance hardware and access control systems. The version release is accompanied by the introduction of its proprietary edge device, the new OnPoint touchless reader tablet. This output allows



security teams to further reduce organizational risks associated with outdated physical security systems, better manage controlled access, and identify safety threats. Edge computing in smart video surveillance offers many advantages including improved response times, a smaller physical footprint, improved scalability, and even built-in failover so that edge devices continue operating without pause if a network failure occurs. www.oosto.com

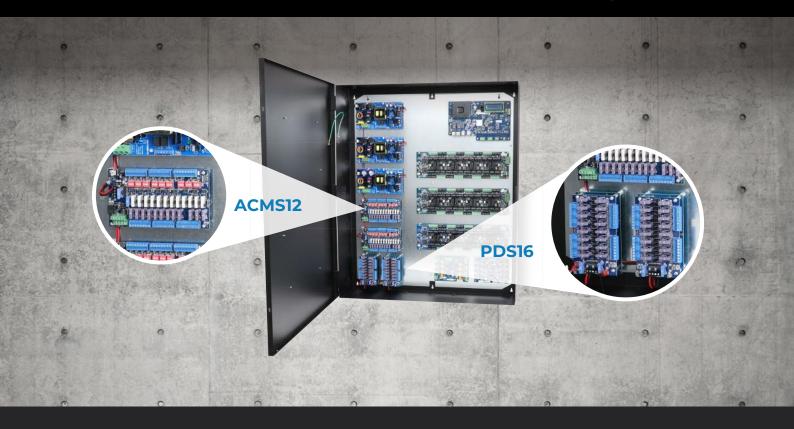


Robust PTZ Camera

Axis has introduced a new camera model that is ideal for wide and long-distance surveillance. This heavy-duty camera meets the MIL-STD-810G standard, ensuring reliable operation in the toughest conditions. The Q6225-LE offers HDTV 1080p resolution and a very light-sensitive 1/2" inch sensor with 31x optical zoom. Featuring forensic WDR, lightfinder, and long-range optimized IR, it ensures sharp, clear images in any light conditions. In addition, high-speed pan/tilt performance ensures exceptional coverage of large areas and great detail when zooming in. The high-performance camera is endowed with built-in analytics such as the company's Motion Guard, Fence Guard, and Loitering Guard modules. Enclosed in a vandal-resistant IK10-rated casing with NEMA 4X, NEMA TS-2, and IP66/IP68 ratings, this heavy-duty camera can withstand winds up to 245 km/h (152 mph). Furthermore, it includes a Trusted Platform Module that is FIPS 140-2 Level 2 certified. Axis has also announced new additions to their M32 series, featuring a deep learning processing unit (DLPU) to enable advanced features and powerful analytics based on deep learning on the edge. www.axis.com

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VIDEO SECURITY

On Track Multifocal Sensor Technology

with Remote Access and Modular Management Danish State Railways (Danske Statsbaner, DSB) operates the local passenger transport on nearly all the railway lines in Denmark. The scope of its responsibilities also includes the international intercity line between Sweden and Germany and Copenhagen's high speed urban rail network. In matters of security, for the last 20 years Danish State Railways has placed its confidence in the German manufacturer Dallmeier for centrally-managed video security and the video technology at almost 180 railway stations, and the Danish company Scanview A/S for support and on-site installation.

herever large numbers of people gather, unpleasant things happen too. Not only thefts and physical altercations but also vandalism of parked trains or drug offences are numbered among the daily incidents in railway stations and sidings. Danish State Railways relies on a video security solution from Dallmeier to be able to take prompt and efficient action in such cases. The solution allows the video images from all locations to be accessed individually by an unlimited number of operators at the DSB main operations center in Copenhagen. Comprehensive display and incident case management functions ensure that an incident can be tracked, counteracted, and investigated. The next expansion stage was put into operation recently - with Dallmeier

Hemisphere software components in the Azure cloud and more than 2,500 cameras, DSB guarantees its passengers and employees the highest possible level of security.

Flexibility Through the Cloud

From the DSB main operations center in Copenhagen, the security operatives tasked with these activities can always keep a watchful eye on everything that happens at the railway stations using the Hemisphere SeMSy video management solution. And the most important software components run in the Microsoft Azure cloud, which is operated by the DSB as its IT backbone. This enables all processes, such as systems management, rights, and user administration and the allocation of computing power to be executed flexibly and from one central location. Since the components are made available centrally, the operators can also access every one of the 2,500 single sensor cameras as well as all Panomera multifocal sensor systems from there rapidly and with an optimum overview. Each workstation and all user views can be configured individually, so that only the widgets needed for the specific activities are visible. This enables employees to concentrate on their specific tasks without distraction.

Maps and Digital Incident Management

Besides classic video management, the modules of the Hemisphere platform enable all pertinent case information such as photos, videos, or witness statements to be collected and recorded quickly and con-



Capturing as much as possible in one image and at high resolution is an essential aspect for security over large expanses



veniently, and then compiled into a digital incident file. Hemisphere also integrates accurate site plans of the individual locations. Operators and security managers can use the map function to easily select the camera they need to respond to observed incidents. The operators manage the systems via Dallmeier workstations and a monitor wall consisting of 22 Hemisphere SeMSy vario decoders. Simple, lossless switching to each individual railway station is guaranteed by Dallmeier PRemote HD, a routine that uses transcoding to conserve bandwidth and enables access to high-resolution video material even when the internet connection is less than ideal.

"Hemisphere SeMSy replaces or supplements many of the systems previously used by DSB, so it improves the efficiency and quality of our workflow. By combining camera technology, cloud deployment and the management components, we are now in possession of an extremely powerful system that offers far more than standard video management," declares Søren H. Nielsen, technical director at DSB.

Long distances and large areas are no problem thanks to the Panomera multifocal sensor technology. Most of the railway stations in Denmark spread over large spaces: parking lots, shopping facilities and platforms all constitute areas that must be monitored. The difficulties lay in the need to ensure that the high minimum resolution quality to enable recordings to be used in court (described in DIN standard DIN EN 62676-4) was satisfied over the entire expanse. In the patented Panomera technology implemented by DSB, up to eight sensors with different focal lengths are combined in one optical unit. The result is a total image in consistently high resolution, in which an unlimited number of detail zooms can also be called up, both in the live feed and in the recording. In this way, Panomera captures enormous distances and expanses in real time with a resolution pattern that is consistent over the entire object space - with very few camera systems. This in turn not only ensures that recordings are always usable in court, but it also allows a big chunk of the infrastructure costs compared with conventional solutions to be eliminated.

Real Enterprise Capability

Danish State Railways employs over 7,000 personnel. Of these, over 1,000 jobs are in administration. Figures of this magnitude entail complex user and rights management challenges in the video surveillance of 180 railway stations. Moreover, it is not only the employees but also public authorities, such as the police, who are authorised and even required to access the video information system. In this context, it is imperative to be able to maintain an overview of rights assignment for reasons of data protection and data security. Hemisphere can therefore be integrated seamlessly into the DSB's user administration active directory.

System updates are another challenge in large-scale environments. In complex projects running for many years, it is imperative to implement a system that allows for The modular Dallmeier Hemisphere software platform also enables creation and forwarding of a digital incident file

incremental updating – it is usually most important for newly implemented systems to be downwardly compatible. Hemisphere offers the capability to integrate existing systems into a new environment, regardless of the original provider, thereby enabling the customer to migrate incrementally. Comprehensive test phases, such as the Dallmeier factory acceptance test, complete this integration and guarantee not only full security but also the optimal performance of the system upon commissioning.

"We updated the video management system used by Danish State Railways with the Dallmeier SeMSy III VMS system back in 2016. With the migration to the Hemisphere platform and its new generation of the SeMSy VMS and other modules in 2020, we were able to implement a kind of modular principle consisting of video management, data management and frontend applications. This enabled us, together with DSB, to 'compile' exactly the total solution that met the requirements at that time in a cost-optimized manner. At the same time, the many other functions and modules provided mean that we are ideally set up to deal with the requirements of the future," says Torsten Ussing, MD at Scanview A/S.

Not Only Products Count

DSB has relied on products from the German manufacturer Dallmeier and the operational and technical services of its exclusive Scandinavian partner Scanview since the digital wavelet recorders of the early 2000's. Ensuring that such a long cooperation continues to flourish entails a high degree of flexibility. Rapid responsiveness, customer-specific stocking of spare parts and short delivery times are the essential prerequisites for such a relationship. But guaranteed data protection and cybersecurity are also essential issues, particularly in the context of video surveillance in public areas and in the age of the GDPR. Dallmeier products are developed and manufactured entirely in Germany and in conformance with the GDPR guidelines of 'Security by Design' and 'Privacy by Design'. In this way, both the Danish State Railways and its passengers benefit from the highest standards of data protection and data security.

CONTACT

Dallmeier electronic GmbH & Co. KG Regensburg, Germany Tel.: +49 941 8700 0 info@dallmeier.com www.dallmeier.com www.panomera.com

Anti-Ligature Camera with Wide FOV

Hanwha Techwin has launched the TNV-7011RC, a compact and anti-ligature corner mount camera that offers a wide field-of-view (FOV) up to 3 MP resolution and 30 fps. The camera is the latest addition to the Wisenet T range, which is designed for challenging environments. The camera has a compact and aesthetically attractive design that fits neatly into room corners and lifts, and it is built to



make it impossible for ligatures to be tied around it or for it to be easily ripped off a wall. The camera comes with a hallway view function to enable operators to monitor tall and narrow spaces like corridors. It additionally features dark IR 940 nm of up to ten meters, to help with monitoring very dark areas. A wide dynamic range (WDR) in the Wisenet T series cameras captures four frames at different exposure levels to create a combined, clear, and vivid image even in environments with strong backlight conditions. www.hanwha-security.eu

Manage Access in One Place

The flexibility of Assa Abloy's Incedo access control ecosystem has been extended even further. Organizations can now deploy Incedo Cloud in locking solutions both in real-time or autonomously at the same premises, finetuning their security and gaining total control over their buildings from one place. Organizations can secure almost any opening with autonomous electronic locks or in real time with online devices. They can issue building users with credentials of their choice, to access authorized areas via smartphone, smart-card or battery-free smart keys - which can unlock both Pulse locks and traditional RFID readers. Adding autonomous devices enables a business to control access to areas that would previously have been uneconomical.

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SECURITY

SECURITY FOR RETAIL

Video Analytics in Security

Options and Best Practices for the Use of Video Analytics in the Retail Sector

Video analytics refers to the collection and analysis of images to extrapolate clear and actionable outcomes. Recent research from the ECR Retail Loss Group (see QR code at the end of this article) shows that retailers are presently primarily focused on security benefits, with the top use case being to monitor for intrusions in and around stores and distribution centres. Indeed, with video analytics, operators can maximise their video management deployment to achieve more than surveillance. Through automatic detection and data interpretation, security teams can speed up maintenance and react faster to critical events.

owever, with the rise of unmanned stores, the ECR Retail Loss Group estimates self-checkout processes account for 23% of total unknown store losses. This indicates self-checkouts as the focus for future video analytics deployments, with most retailers surveyed planning trials in product identification and non-payment alerts. However, as the need for all areas of retail to collaborate across organisational boundaries becomes more important to increase profits and combat the progress made by competition from online retailers, in-store security systems in retail applications must expand beyond security to include other business functions and departments within the retail industry.

Unlocking Consumer Insights, Improving Productivity, and Boosting sales

To fully realise the potential of video analytics, cross-functional use will be critical to success. Security systems are constantly capturing valuable information that can be used to transform businesses. Advanced retail analytics solutions can interpret such data to unlock consumer insights, improve staff performance, enhance customer experience, and boost sales conversion rates. Such functions can be added as part of a unified security solution and can be scaled to a single store or multiple locations globally.

By tapping into video gathered via a physical security system, retail analytic applications use modules like visitor counting, conversion rates, queue management, heat maps, and directional analysis to better understand customer behaviour and make real-time informed decisions that increase both consumer engagement and in-store profitability.

Using conversions as an example, studies have shown that 90 percent of consumers are more likely to convert from just browsing to a sale when they are helped by a knowledgeable associate. An advanced retail analytics solution can be configured to notify management which departments are crowded so that they can deploy enough associates to help with any inquiries. This can both accelerate conversions and reduce the cost of labour through better employee management. Losing sales due to long lines at the checkout counter? Retail analytics solutions can help reduce customer abandonment caused by long queues by notifying management to increase tills when long lines are detected. These solutions help managers act at a moment's notice and turn undesirable situations into desirable and more profitable outcomes.

Display and promotion effectiveness – and other longer-term issues – can be improved with a feature like heatmapping. By visualising the areas in a store that represent hot areas – where shoppers dwell – compared to cold areas – which receive very little foot traffic – managers can measure the effectiveness of certain displays and promotions and make changes to address insufficiencies.

Best Practices for the Successful Deployment of Video Analytics

Despite video analytics' potential as a powerful tool in loss prevention and generating insight, its deployment can often come with its challenges. Here are a few crucial elements organisations can consider when evaluating and deploying video analytics to increase success in a retail environment.

Organisations must first start by identifying the problem they're looking to solve. Then, set the right performance expectation, and define metrics for success. Video analytics offer the best insights when deployed as a solution to a problem rather than a solution in search of a problem – the latter is often challenging to evaluate.

Having defined the problem, finding the appropriate video analytics for the job will help allocate resources appropriately and limit overestimating results. Companies need to consider each analytics' intended environment of operation and judge how well it matches their scenario. Using video analytics outside of their intended parameters makes performance unpredictable, often to the detriment of business goals.

Another consideration is the serverbased or edge-based nature of the video analytic processing and its effect on network bandwidth. Both video analytic processing models have their limitations and advantages that relate to a system's architecture.

- Edge-based analytics reduce bandwidth usage by transmitting only the results of video analytics processed by the camera. However, this requires specialised cameras equipped with the hardware needed to run video analytics.
- Server-based analytics process video streamed to a server which increases bandwidth usage. However, this allows operators to take advantage of the existing video surveillance infrastructure.

The right security system will include event-to-action, alarm management, and map-based monitoring to leverage video analytic data. It becomes even more powerful when paired with a decision management system that can trigger workflows when suspicious activity is detected, or correlate multiple events into a single incident trigger. After selecting and deploying a video analytic solution, it is crucial to define metrics to measure performance continuously. Video analytics is not a "set-and-forget" type of technology. High accuracy has traditionally been hard to obtain, especially in open areas with many moving parts and people. Often, factors in performance issues are video quality as well as lighting and positioning. Monitoring performance and working with a trusted vendor will facilitate the fine-tuning adjustments that make the difference between a fair purchase and a valuable return on investment.

A clearly defined set of success conditions before deployment also makes it easier to establish the return-on-investment A good example is the people counting video analytics used to prove compliance to occupancy regulations. This use case's ROI compares the cost of the video analytic solution against hiring staff to count customers and the cost of any violation of occupancy regulations.

Another way to increase ROI is to look for more ways to use video analytic data. Deploying security in a unified platform allows for the combination of POS data with video recordings and video analytics to pinpoint suspicious transactions. For example, motion detection video analytics can reduce investigation time for fraudulent returns where no customer was present by narrowing down the search to only transactions where a return was completed, but no motion was detected in the area customers would typically occupy.

Thinking beyond the immediate results of video analytics and combining them with other data sources on a unified platform empowers operators with a complete view of events in each retail location.

In Conclusion

Retail analytics software applications can make the most of existing security resources and use the invaluable data they already gather to benefit a variety of departments in a retail establishment – retail marketing, retail operations, and merchandising. One of the most important benefits offered by retail analytics solutions that are part of a unified security solution are the additional information they can provide physical stores to compete with online retailers.

Online retailers have long had the distinct advantage to easily collect vast amounts of data and analytics from every customer visit. Today, traditional bricks and mortar retailers are wising up and are beginning to bridge the data gap, by fully leveraging the data that they are already collecting to improve sales, operations and customer experience.

The Author Steve Green, Business Development Director, Genetec

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INTERVIEW

A Perfect Fit

Monitors from Eizo Combined with Cameras from Axis: How, Why, and What the Customer Gains

Product good, project good? Not always. When the project is video security, it requires a lot more than just the installation of individual components. The intelligent interaction of devices must work precisely. Eizo, amongst others a supplier of IP decoder monitors and IP decoder loudspeakers for connection to IP cameras and systems without the need for a computer, and the video security specialist Axis are cooperating to each conceive the best possible solutions. GIT SECURITY asked Jochen Sauer, Architect and Engineering Manager at Axis Communications, and Oliver Nachtigal, Business Development Manager of Eizo, how that works, what must be considered in the process, and what advantages the customer is going to have.

GIT SECURITY: Mr. Nachtigal, Eizo and Axis are working together – how exactly?

Oliver Nachtigal: We have already been working together at many different levels for many years. Technologically on the one hand: Axis cameras and Eizo monitors communicate with each other and provide sophisticated solutions as a result. In projects on the other hand: we support each other to ultimately be able to provide the customer with real added value in their video security solution.

What do Eizo customers obtain from this?

Oliver Nachtigal: The close cooperation certainly provides the customer with a high-end solution. We ensure quality, sustainability and also that planners, system installers, and operators are always satisfied on commissioning day.

Mr. Sauer, what does the partnership mean for customers of Axis?

Jochen Sauer: As soon as you look into the purposing of a system, as soon as you know exactly what the customer wants, working in partnership becomes extremely important to be able to integrate all the various aspects of the project.

Tell us about some typical use cases, please.

Jochen Sauer: Well, for example, if a solution is required that is conformant with the GDPR, that makes no recordings but simply displays the cameras' images live, then it is important from the start to exclude the use of any computers. This is where the Eizo monitors come into play. And the better the security cameras are integrated into the intelligent monitors, the better the result and the versatility of the system for the customer. No matter whether it is just one security camera that delivers live images to an intelligent monitor - or 32 cameras. No matter whether with fixed cameras or with moveable speed domes. We can also provide interaction with other components, such as a door station, for example. The 'Use Case' always defines the application - and then you need a good partnership to ensure that all devices work logically together when it is finished. In one particular project, the customer has consumer-level monitors in use for security in a chain of shops, which used to fail every few months. Replacement often took up to fourteen days - unacceptable for the customer. Today he has a solution in place using high-quality Eizo monitors together with Axis cameras and a video management system (VMS) from Milestone, as well as



Eizo and Axis – a perfect fit: Holger Schmitz, Sales Manager Industry from Eizo, presents their solutions at Light + Building in Frankfurt, Germany

an audio system because a PA function was also required together with peoplecounting. This was a total package that now works excellently – and the customer is absolutely happy. Eizo worked together with Milestone to find a solution so that the monitors could be supplied from the video management system, just as the customer required.

Oliver Nachtigal: We developed an Eizo video wall plugin for this, which provides an interface so that the screen layout on the monitors can be adapted directly from the client GUI, that is, from the Milestone VMS, and present alarms on the monitors. In this particular case, the customer wanted a specific screen layout of the incoming camera images that he required because of operational procedures. The user-friendly web UI from Eizo allows easy adaptation of the video streams presentation with seven standard options and is able to display up to 32 video images per monitor. The video streams can be placed in various positions on the screen using up to seven user-defined layouts.

Communication between the various systems is becoming ever more important. The whole package must be right, and therefore it often has to be customized. Every individual product can be super, but the whole solution must work well at the end of the day. And that is the case because the cooperation between Axis and Eizo also works very well.

Which new markets or industries could be opened up through the cooperation between Eizo and Axis?

Oliver Nachtigal: The case we just mentioned was a project in the retail sector, a renowned luxury goods company with more than 300 branches. But, in general, each individual solution that we develop together with our partners to the highest quality standards are applicable where reliability is of prime concern.

Jochen Sauer: There have been quite a few projects where the customer wants to be sure that no server is connected that could record the images. You frequently find the combination of camera, network, server, monitor. But then there are applications, such as one for the nurses room in a hospital: the nurses want to see what is going on in the maternity ward. But ... the customer's requirement, in this case the city administration, was that there should be no recordings. The Eizo-Axis solution was the answer. Check: the security cameras just send images reliably to the monitors. Job done.

The Eizo IP decoder monitors do not need a computer in between – cameras can be connected directly. What other developments do you have going on?

Oliver Nachtigal: We are continuing to develop our systems further. One example is our VMS failover function: the Eizo decoder solution automatically takes over the job of displaying the images in the desired layout if required, directly from the IP camera streams. This provides a backup solution if, for whatever reason, the video management system should stop providing streams to the monitors. This is particularly interesting for cases where the connection to the VMS, for example in an area of sparse infrastructure, is liable to fail, or where there is particular danger and switching off the VMS would be beneficial for criminal activity. There is also our Alert-to-Action function which puts everything quickly into view. This function helps to quickly show the security personnel the relevant images from high-volume areas or of critical infrastructure. With regard to resources, the speed of reaction is improved and simultaneously the security, for example, of hospitals or public transport is maintained.

Which markets offer the best potential for the Eizo/Axis combination?

Oliver Nachtigal: We do have individually adapted configurations for every industry,

as I said, whether it is for image transmission in hospitals, maybe from the operating rooms, whether it is for critical infrastructure, such as water treatment plants ... Jochen Sauer: ... or to secure manufacturing equipment, financial institutes, logistics warehouses and many others.

In summary: what are the main advantages of the partnership between Axis and Eizo for your customers?

Jochen Sauer: The Axis and Eizo partnership is a reliable one: we have the same company strategies and want to provide our customers with long-term solutions to their operational challenges.

Oliver Nachtigal: A significant plus-point and important for every customer is the 'TCO', the system's Total Cost of Ownership. The customer can be confident that they will receive a stable and low-maintenance system that lasts a long time. We are talking here about the reliability of updates or patches – and also that functionality can continue to be enhanced. Wherever high-quality and sustainable installations are needed, the customer makes the right choice with Eizo and Axis solutions.

CONTACT

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Axis Communications GmbH Ismaning, Germany Tel.:+49 8935 88170 www.axis.com SPECIAL FOCUS HOSPITALITY

Hotels, Casinos and Restaurants

A Technological Overview of the Latest Security Systems in the Hospitality Sector



For the security industry, the hotel and restaurant business is a very diverse market, where customer satisfaction is the primary concern. It must work so smoothly that every guest can relax and does not have to think about it in the first place. In this focus article, GIT SECURITY takes a look at various application scenarios in the hospitality sector.

The hospitality industry can be broadly divided into three main areas. 1. Accommodations, 2. Food Services 3. Leisure. Point 1 includes accommodations of all kinds – but mainly hotels. Where many guests stay overnight and where they can engage in activities on and around the premises, such as visiting restaurants, bars, sports facilities, swimming pools, etc., there is a lot of diversity in security requirement. It is challenging to secure everything optimally, manage access authorizations and minimize theft. Point 2 and 3, the Food Services Sector and Leisure, are often also directly included in hotels, so

these issues must also be considered by the hotel management. However, security differs significantly for all three. Whereas in the hotel special attention must be paid to access control, many leisure themes offer a sophisticated video surveillance system that should monitor all possible processes, as well as license plate and facial recognition. Restaurants are more prone to theft cases.

Handling Doors and Entrances in Hotels

In Hotels, door handling, access rights and security are so intertwined that hotel

managers need a clever solution that is flexible yet safe.

SPECIAL

FOCUS

There are many providers for powerful yet flexible access control systems. One of them is the Sesamsec Reader Group. They are offering a hybrid solution that covers both, ID cards and smartphones as identification media.

Another vendor is Südmetall. Their ÜLock-B locks provide security on both sides of the door whereby the protection of human life and the protection of property enter into a synergy. A panic function in the direction of the escape route ensures a safe means of escape in an emergency.

Sesamsec Reader Group: Powerful readers are at the heart of a hybrid access control solution that supports both ID cards and smartphones as identification media



The Gemos solution of the Gretsch-Unitas Group combines various individual systems into one overall system



Schulte-Schlagbaum AG's hardware and software for keyless access management provide a smart solution for optimized building automation



The self-locking function ensures that the door otherwise always remains locked.

From the outside, the lock offers no surface for attack because the electronics are located in the lock case and the lock has a high resistance against mechanical manipulation. In addition, the data transmission between the lock, RFID card and battery-powered RFID reader is encrypted in the best possible way. This provides optimum protection against burglary.

They can also provide a management software: ÜManagement 2.0 is a license-free administration software for access control, with which single objects, but also small to medium-sized hotels or several objects can be administered at the same time. Authorizations and authorization groups/user groups can be assigned to the individual keys via the software. The installation of the software can be either very simple for a single-user version, or on an SQL server for multiple workstations.

Smart building control systems are already in use in many hotels. Schulte-Schlagbaum AG's hardware and software for keyless access management provide a smart solution for optimized building automation. Access to doors, lockers and protected resources can be controlled from anywhere and everywhere using electronic locking systems. With the SAG Smart Access system, various identification options can be individually selected as needed: via smartphones and Bluetooth, RFID transponders/cards or using a PIN code – these options can also be flexibly combined with each other if desired. Gemos, the GU Group's advanced PSIM, combines all the different individual systems into one overall system with its hotel solution. Special security requirements apply to hotels. High flexibility and simple management of locking systems are important criteria and all the more important the larger the hotel. Gemos is designed from the outset for the entire building and combines the functions of the individual trades on one system.

Video Security in Hotels

A survey by Wellness Heaven stated that "luxury hotel larceny is rising precipitously" with mattress theft having increased by 35% in the last three years and television theft rising by 11%.

Well-designed video systems are one of the most effective tools to combat any safety and security risks, especially when they are integrated with other building management and back-of-house systems. In addition, the latest generation of video solutions deliver benefits that provide hotels with a competitive advantage from a business perspective as well. For competitive hotels, video is no longer just used to reduce costs and cut risks, but to improve service delivery and efficiency in a way that is adding competitive value to the customer offering. For example, AI-powered video analytics can be used for queue and occupancy monitoring to alert managers to divert staff appropriately, as well as heatmapping historic data to understand peak times and streamline operations to guarantee a consistency of service.

To read all about how to utilise security tools in the hospitality sector and to evolve and modernize, Idis highlights an educa-



With Idis monitoring, AI-powered video analytics can be used for queue and occupancy monitoring



RLS-2020I from Optex is mounted discreetly on a wall or ceiling and can create an invisible virtual wall using Lidar technology

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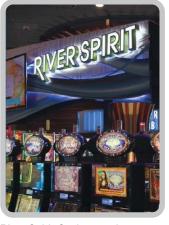
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River Spirit Casino receives approximately 10,000 guests per day



Oosto OnWatch real-time watchlist alerting to recognize potential security threats, the solution delivered vast efficiencies in operations by ensuring that evicted and banned patrons were immediately identified and apprehended

tional eBook which can be downloaded on their website.

Another Vendor is VTIS. They are specialized in modern video solutions. They use video technology in various subareas to achieve the best solution: Highresolution IP cameras, high-performance and versatile video management systems and video analytics, but also innovative AI applications ensure that premises are reliably secured around the clock. Their services include:

- DSGVO-compliant video surveillance solution
- Secure feel-good atmosphere with video surveillance solutions from VTIS
- Safeguard sensitive areas
- Planning and installation by experts
- Preventive security in reception areas
- Secured access
- Protection against vandalism
- Monitoring of parking lots and underground garages
- Anti-theft protection in lobby, luggage and storage areas
- Discreet integration into hotel environment

All solutions from VTIS for hotels have been field-tested for years and successfully used by numerous companies in this area.

Security for Restaurants: A Virtual Curtain Against Theft

For the restaurants inside of hotels, the RLS-2020I from Optex is an example for compact indoor detection. It uses Lidar technology to provide a customisable "virtual" curtain or plane with a detection area of up to 20x20m. Mounted discreetly on a wall or ceiling, Optex Lidar sensors can create an invisible virtual wall to protect assets by detecting hands or bodies getting too close to the artwork or valuables. It can be set precisely to only protect the assets and leave the section of the wall between them so only the assets are protected, and any contact with the wall section in between doesn't raise any alarms.

Stanley Security, for example, understands that each restaurant is unique, and therefore there isn't always a one-size-fitsall solution when it comes to security. They work with the customer to design, build and maintain a security system tailored to your restaurant's individual needs so you can focus on running a successful and safe business.

Security for Casinos: Identification of Bad Actors in Real-time

200,000 Square Feet Casino Upgrades Security System

At 200,000 square feet, River Spirit Casino receives approximately 10,000 guests per day. The environment for security teams is a complex, cross-site operational challenge in managing the identification of bad actors in real-time and under various levels of lighting, occlusions, and face coverings. River Spirit Casino's security team realized that in order to maintain the property's reputation, combat thefts and fraud, maintain compliance with regulatory requirements, and be able to research video footage retrospectively for investigative purposes, facial recognition technology offered numerous benefits.

Upon implementing Oosto OnWatch real-time watchlist alerting to recognize potential security threats, the solution delivered vast efficiencies in operations by ensuring that evicted and banned patrons were immediately identified and apprehended, while security teams were able to better track persons of interest throughout the venue without disruption to guests.

Another example for securing casinos in the leisure sector comes from Milestone Systems. Last year, they launched a new strategy with the ambition of becoming 3 times bigger towards 2026. The journey is aiming to take to a leading position in Video Technology Software in and beyond security. As part of the strategy, Milestone will focus on helping customers' needs in building industry-specific solutions for companies that go well beyond security. The hospitality industry is one of the key industries for Milestone, and within the hospitality industry they have a particular focus on casinos.

This is what they offer casinos:

- Helping support compliance: The regulation in the casino industry is tough, and video is at the core of it – so Milestone wants to be more active in supporting customers compliance.
- Bring in operational efficiencies: Video operations are very intensive in casinos, and there are a lot of ways they can help save time, optimize tasks, and ensure users can focus on the core of their jobs, and are helped by technology.
- Support the casino business this is where video technology can bring in value beyond security.

Indigovision also is a supplier for video surveillance specialized in casinos. They have a flexible video surveillance solution and with their distributed architecture, they can add any number of work stations for excellent casino security management. They can even provide access to external regulators. Security officers can focus through a crowd, right to the edge of a table and read the numbers on the cards and the expression on the players' faces. The surveillance systems is so smart it runs at 1fps when nothing is happening and jump to 30 fps when it is. The Ultra 2K camera makes security managers feel like they are one of the players. With Smart. core compression the system takes up less space and is easy to operate.

Suppliers

Gemos I www.g-u.com Idis I www.idis.com Indigovision I www.indigovision.com Milestone Systems I www.milestonesys.com Optex I www.optex-europe.com Oosto I https://oosto.com/ Schulte-Schlagbaum I www.schulte-schlagbaum.com Sesamsec I www.sesamsec.com Stanley I www.stanleysecurity.com Südmetall I www.suedmetall.com VTIS I www.vtis.de



PERIMETER PROTECTION

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PERIMETER PROTECTION

Recall Plus Extension

GSTVA Will Be Back in April 2023

In the last issue of GIT SECURITY we published the results of the first "GIT System Test Video Analytics" (GSTVA) that was done in April 2022. Eleven powerful, currently available systems were subjected to intensive test scenarios we developed together with the expert office of Markus Piendl and the system house i-Alarmsysteme.

We will extend the scope of the testing beyond video analytics and will test radar, PIR and LiDAR systems, too

GIT SECURITY

ANALYTICS

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VIDEO

02

The April 2022 Test

10

For the first GSTVA the intrusion tests were divided into different scenarios and scenario groups. Variations were made between different types of movement, i.e. approaches were made at different speeds, angles and rhythms. Different types of clothing and camouflage were used in further variations, which were evaluated separately, and both day and night tests were conducted. Some test scenarios involved destabilizing the video analysis systems through the use of pyrotechnics, for example. The results of the intense testing are available via the QR code at the end of this article.

After the Test is Before the Test

One of the results from the first test series was that while the resolution, image quality and low-light display of all the tested systems are now consistently at a very high level, there is definitely 'room for improvement' in video analytics. As expected, the performance of some systems could be improved for complex camouflage and movement types. With better system tuning to local conditions and refined algorithms tuned to more challenging scenarios, performance can be improved. To give other vendors the chance to participate in the test and to include new or improved systems, we will launch the second GIT System Test Video Analytics in April 2023 with the same scenarios we used in the first test. In addition, further tests in other product groups will provide a good basis for security decision-makers.

Extended Range of Tested Systems: Radar, PIR, LiDAR

To deliver more valuable information beyond video analytics about perimeter protection best practices, we will extend the scope of the testing and will test radar, PIR and LiDAR systems in addition to video systems in a new test series, GIT System Test Perimeter Protection GSTPP.

We are already in close contact with different vendors about the tests next April, but in case you are a representative of a vendor producing systems for perimeter protection and you want to join the testings in April 2023, please let us know via GIT-GS@wiley.com.



Link to the results of GIT System Test Video Analytics



PERIMETER PROTECTION

Experts in KRITIS

Sorhea Opens Office in Germany and Launches a New Generation of Infrared Barriers

Expanding on the DACH market, French company Vitaprotech comprises 11 companies in the security industry. One of their recent goals is to establish their companies in the German-speaking market with a physical presence. Sorhea has been one of their successful projects and not only celebrates their first year with the official office opening, but also launches a new generation of their reliable infrared barrier. GIT SECURITY EMEA visited the event and congratulated the team in person on site.

n November 3, 2022 Sorhea officially inaugurated their new premises in the city of Rüsselsheim, Germany. For this occasion Sorhea took the opportunity to meet with public representatives, partners and customers to introduce Sorhea and its team, and to exchange ideas in a cozy atmosphere.

Lord Mayor of the city of Rüsselsheim, Mr. Udo Bausch and the French Consul General, Dr. Ilde Gorguet, gave us a warm welcome. The Vitaprotech Group, the umbrella organization of Sorhea and other daughter companies, has set itself the task of further expanding its business on the German market, to invest further in the Rüsselsheim site in the future, and to establish itself in the regional community in the long term. Once again, it has been shown that personal contact is a valuable basis for building a stable network and a good trusting cooperation, especially for successfully initiating and implementing projects together.

New Generation of Autonomous Infrared Barrier

Sorhea is upgrading its Solaris infrared barrier. The autonomous active infrared barrier is installed at numer-

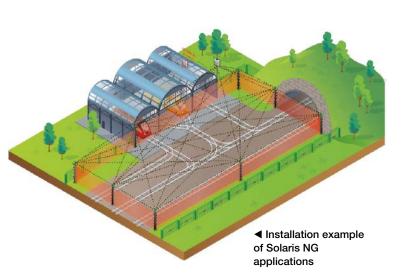
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Solaris NG, the new generation autonomous infrared barrier with 100 m range

ous sites in Europe and throughout the world, its solar energy supply and radio communication making it a reference in the perimeter security market. Introduced in 2009, the Solaris column was the first 'low power' infrared barrier on the market. Its very low energy consumption allows it to operate in all weather conditions over a 100 m range. The solar power supply is backed up by a battery that guarantees two months of operation in complete darkness. The system has already been installed at various sites in Scandinavia and Canada, and functions just as well as a 12V or 230V powered system in these low light latitudes. Alarm information is transmitted without cabling via a dynamic radio mesh network. As no cabling is required, the column is easy to install and reduces civil engineering costs.

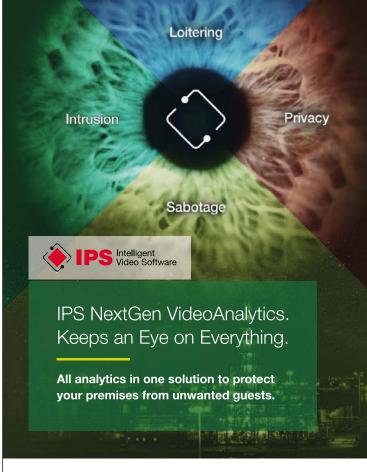
GIT SECURITY AWARD 2022

Solaris won the GIT SECURITY AWARD 2022: this prize is given every year by the international GIT SECURITY magazine to reward the most efficient perimeter security products with the most innovative functionality. To



achieve the best possible infrared barrier performance, Sorhea boasts a high density of infrared beams that creates a virtual wall that cannot be breached without sending an alarm. The denser the infrared wall, the finer and more reliable the detection. With 10 cells on 3-meter columns, Solaris is currently the only existing autonomous infrared barrier offering such a high infrared density, over a range of 100 m.

The system also benefits from Sorhea's technological progress on the radio: full encryption of the Solaris radio network ensures maximum data security, and communication via the LoRa protocol offers long range, energy savings and good resistance to interference. The train-filtering functionality, so far only available on Maxiris barriers, is now also available on autonomous Solaris NG barriers. This algorithm can tell the difference between a vehicle (train, tram, or even a plane) and an individual passing between two columns, so no unwanted alarm is created and the perimeter security system is not interrupted. This new generation is also available in an all-plastic version: made of polyacetal, the housing makes the column frangible. Solaris NG can then be installed on very specific sites, such as airport runways and high voltage transformer sites. Solaris has been developed in accordance with the highest international standards, allowing it to be installed at all sensitive sites around the world.



Re-inventing Video Security since 1965 ips.securiton.de/en

SECURITON

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PERIMETER PROTECTION

Sufficient Light at the Perimeter

Why Sufficient Light at the Perimeter is Really Important: Advice from the Experts, Markus Piendl and Hannes Dopler

> During the GIT System Test Video Analytics (see: https://bit.ly/3hKN6r6), GIT SECURITY spoke with the two experts Markus Piendl and Eng. Hannes Dopler, MSc. on the subject of lighting and why good lighting can make or break perimeter protection projects. How important is the matter of lighting at the perimeter? Why did our experts Markus Piendl and Hannes Dopler prefer combined infrared/white light illumination from Raytec for our GIT System Tests (the next tests are scheduled for April 2023)? And what traps can you fall into with the various lighting configurations? The answers and advice are, in the true sense of the word, illuminating.

Hannes Dopler and Markus Piendl

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GIT SECURITY: Hannes Dopler, what importance does lighting have in a perimeter protection concept?

Hannes Dopler: The lighting is an essential factor for the success of the security plan. Intruders are usually dressed in dark clothes and avoid any bright, welllit or open spaces. Using white light can provide additional security by preventing any critical, neuralgic areas such as dark approach routes or terrain and avoiding any natural cover. It is important that permanent lighting is only installed where, on the one hand, it is considered necessary for personal security and, on the other hand, as a result of a security evaluation - one can consider approach roads, parking lots, loading bays, gates and doors, technical equipment installations. At other locations, the lighting can be controlled by motion detectors or other sensors. In these cases, adjacent areas should also be activated. Lighting equipment must not have any negative effects on the image quality of the video surveillance. The lighting should be able to be fully activated by the nighttime security personnel. Equally important is

9-Point Check List for Professional Lighting

- 1. How far does the lamp shine?
- 2. What shape does its beam have?
- 3. What angle of lighting must be covered?
- 4. How efficient and reliable is the lamp?
- 5. What functionality does the lamp have, in particular when software integrated to prestigious video suppliers?
- 6. How versatile is the lamp?
- 7. How much power does the lamp consume?
- 8. What lifetime can be expected?
- 9. How quickly can the manufacturer help with guarantee claims, certification or technical support?



Ideal illumination: Raytec's Vario2 lamps cover the testing ground of the GIT System Test Video Analytics

sabotage-resistant installation while still being accessible for maintenance, and a sustained power supply.

That sounds almost like a lighting plan that would be discussed with the clients of security system installation companies?

Hannes Dopler: Correct. Tactical considerations and also safety at work aspects could be the start times of lighting – think: summertime or wintertime – as well as the lighting intensity and direction. An example from real life: a fork lift driver was dazzled by the light from the warehouse opposite and did not see a person walking across the driveway.

But there are also natural sources of dazzling light – what can be done here?

Hannes Dopler: Think about the rising and setting sun. Cameras must not be blinded by the lighting and need the ideal lighting level. Look out for polished and bright surfaces, such as shopfront elements, glazed surfaces, decorative elements, air conditioning pipes, isolation of pipes and the reflections they create. Wet surfaces, paints and, outside, passing vehicles, in particular can all disrupt video analysis because of reflections.

How can an end-user or an installer get close to the ideal type of lighting?

Hannes Dopler: It must be established whether a narrow strip or a larger area is to be illuminated, or maybe just a spot. Generally an even, pleasant lighting is recommended. The video images should be checked at regular intervals both by day and by night. This is the only way to recognize faults, interference and alterations to the environment. It is also necessary to regularly trim greenery near the perimeter.

Markus Piendl, you point out possible mistakes when lighting perimeter areas in your presentations. Why is it then such a challenge for end customers and also for installers to develop a good lighting plan?

Markus Piendl: There were no recognized lighting standards in the security industry for a long time. In particular with regard to range, there were only the subjective details provided by the manufacturers themselves, who all claimed to have produced the best ever lamp. There were no reference images and even a testing ground was only rarely available.

What could be done?

Markus Piendl: These matters are usually discussed right at the start during successful projects with professional lighting: How far does the lamp reach, what form does its beam have, what angle has to be covered, how efficient and reliable is the lamp, what functionality does the lamp have, in particular when software integrated to prestigious video suppliers, how versatile is the lamp, how much power does the lamp consume, what lifetime can be expected, and how quickly can the manufacturer help with guarantee claims, certification or technical support?

Going back to the current GIT System Test Video Analytics: why did you decide to specifically use the hardware from Raytec?



'POWERS' at a Glance

There were no recognized standards in the security industry for the measurement of lighting distance for a long time. The only data on lamp range was the subjective publication of individual manufacturers – which led to the most varied claims. For this reason it was nigh impossible for consultants, installers and end-users to specify the surveillance illumination with confidence, to compare products or to attain a uniform level of lighting. Even Raytec was confronted with this problem until now, which is why the company has published the first open and transparent surveillance lighting standard for the industry:

- P: Peak Power
- O: Overall Power
- W: Width/Angle
- E: Environmental
- R: Reliability
- S: Specification/Features

Raytec: Reliable lighting is important for perimeter protection

Markus Piendl: In this case, the 'POWERS' standard developed by Raytec impressed us, the one created by Tony Whiting and David Lambert...

... both members of the Raytec management ...

Markus Piendl: ...right. And with POWERS it is possible to compare the lighting power as well as to include various influencing factors so that it is easy to compare and specify various lamps. It was important for us to establish clear and even illumination. The best image quality at night was only just about good enough to ensure that the video analysis could be optimally employed by minimizing the image noise. We are very happy that this worked, and that the feedback from the various manufacturers was entirely positive.

Hannes Dopler spoke extensively about white light and its advantages. We think we may have found in you a fan of infrared light. Is that impression justified?

Markus Piendl: I like the discreet, hidden use of infra-red light over long distances. I do not consider it a disadvantage that the result is only a monochrome image, insofar as it is correctly interpreted by the security personnel. White light is an obvious deterrent, of course, but it also frequently assists criminals. Wherever the project and protected object allow, I have tended to use infra-red to grant the attending police the element of surprise and enable arrests. Hybrid solutions also exist, combining both infra-red 850nm and white light in a single lamp. These lamps provide great flexibility and could be a good option if you are lighting a perimeter which requires covert surveillance, but also want to use white light as a deterrent.

Information about the lighting used during the GIT System Test Video Analytics 2022: in use was the Raytec VARIO2 HY6 Infrared at 850 nm and the White Light Hybrid lamp. Complementing this article, you can find out more at GIT-SECURITY.com, including images from the nighttime tests during the GIT System Test Video Analytics – with various different reductions of the lighting power in comparison.



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17-19.1.2023 // Nuremberg, Germany

DERIMETER ROTECTION

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PERIMETER PROTECTION

Utilising the Power of LiDAR

How LiDAR Technology Improves Detection and Deters Intrusion

To prevent theft or damage of any kind, timing is essential: being able to quickly detect intrusion increases the chances of dealing with and deterring any potential threat or crime. Perimeter protection plays a decisive, but often underestimated, role. However, securing perimeters effectively can be challenging, especially when considering high-security sites and critical infrastructure environments.

iDAR-based intrusion detection is increasingly a preferred choice to enhance perimeter security due to its precise detection and proven reliability in variable lighting conditions, including complete darkness and in extreme weather conditions. In addition, the target object can be defined by size and distance of movement, and it is therefore easy to ignore most wildlife, birds, rodents and cats which could be a major cause of false alarms for other technologies.

Customisable Virtual Protection

2D LiDAR technology has the ability to be mounted vertically, horizontally and angled, protecting with an invisible laser wall or plane and can be used in a variety of perimeter protection applications providing very accurate and reliable detection. LiDARs can protect the top of a fence or wall, detecting any attempts of anyone climbing over, and can also provide an extra security layer in access points through the perimeter. Redscan Pro LiDARs from Optex provide detection coverage up to 100 m with 190° field of view with just one sensor.

Alongside protecting the perimeter against intrusion, LiDARs can work with a wider VMS, access control, and more, to provide timely alerts of anything that may signal exchange of goods/information or a possible escape attempt in lawenforcement facilities.

Point Detection

One of the most effective point location or point detection technologies available in the market is LiDAR, as it can provide the exact coordinates of where intruders are located, which is particularly important when securing large perimeters or areas where intruders are often more difficult to spot.

LiDAR stands for 'Laser imaging, detection and ranging' and typically works by what we call 'time of flight', which is when a sensor emits pulsed light waves into the surrounding environment. These pulses bounce off surrounding objects and return to the sensor. The sensor uses the time it took for each pulse to return to the sensor to calculate the distance it travelled, and with this it is able to provide the exact X,Y coordinates, enabling security staff to know, in real time, exactly where the security breach is taking place, which in turn makes the visual verification process faster as cameras can look precisely to the location where the intruder is, and then track them throughout the protected area.

Securing Entry Points

Within a perimeter, there are some critical areas where the risk of a breach is significantly higher. These are usually access gates or turnstiles, where an intrusion is more likely to be attempted. LiDARs can create virtual doors to protect gated access to the perimeter, ensuring there are no vulnerable gaps or access through blind spots while vehicles travel in and out. The system can be easily configured, so when a person is coming through the virtual door, an alarm is triggered to the security system, however if a car is coming through no alarm is raised. The system can also integrate with a VMS and other devices such as cameras and ANPR (automatic number plate recognition) to provide operators with more context.

In remote locations, where no traffic should be expected, Redscan sensors can be installed horizontally and facing out, creating a pre-warning area to alert of anyone loitering or approaching the gate.

Narrow Corridors

It is common to find narrow corridors by the perimeter line, whether it is a narrow space created by vegetation growing near the fence line, a building that is too close to the perimeter wall or buildings in a high-security area which are next to each other. Protecting these narrow corridors is a complicated task for many technologies, mostly because of the narrow space that needs protection, sometimes just a couple of meters, and with occlusions that could block the field of view. With a response time of 100 ms to classify a target, 2D LiDAR sensors are the optimal alternative to effectively and consistently solve this problem and ensure no real intrusions are missed.

Assisting Security Teams

With Redscan Pro LiDARs, alerts can be set up based on different rules or logic, which means the security system can be adapted to whatever an organisation needs to monitor and filter out, so security teams can focus on what matters. In a logistics centre, for example, large vehicles like lorries can be filtered out, so alarms are only triggered by detecting smaller vehicles and pedestrians approaching the restricted area.

Each detection zone can also be independently configured, so the area around a gate might have an immediate, priority alert, but the area around it may have a lower-risk area and might issue a pre-alert



Redscan Pro LiDARs can cover up to 100 m with 190° field of view with just one sensor

warning to operators. Alerts can be sent based on what else is detected in a zone. If a person enters a zone where there is a security guard, the system can be set to not issue an alert – but if the guard is absent, operators can be notified of the visitor's presence.

LiDAR also acts as a powerful component of a wider security system, integrating with VMS, alarms, video cameras, access control, perimeter access, and more. A further advantage of Redscan LiDARs is the ultra-fast transmission of data, with object detection under 100 ms. In this way, LiDAR helps to provide a faster response to any incidents.

Conclusion

Security is an ongoing challenge and choosing the right protection for the perimeter will require an assessment of the security risks, the operational requirements of the site and the size of the perimeter. Intelligent detection with LiDARs adds precise, reliable and early detection of threats at the perimeter level, enhancing existing physical barriers and when integrated with video surveillance and a wider security system it provides tight protection of the perimeter, suitable for small to medium commercial, logistics and industrial facilities, right through to larger utilities, law-enforcement, government and military sites.

CONTACT

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Secure Connected Device Accreditation



Salto Systems has become one of the first electronic access control manufacturers to achieve Secured by Design's new 'Secure Connected Device' accreditation for IoT products. The new scheme enables companies providing IoTconnected products and

services to demonstrate that their products have achieved the appropriate IoT standards and certifications from a Secured by Design recognized certification body, working closely with certification bodies who assess IoT products and services against all 13 provisions of the ETSI EN 303 645 standards. The IoT product or service needs to be assessed on an annual basis. Salto Systems MD Ramesh Gurdev says, "Achieving this new accreditation demonstrates to current and potential customers that our connected products continue to meet the highest security standards." www.saltosystems.com

Pro-Active Video Surveillance

TiOC (three-in-one camera) from Dahua Security is a solution to be considered when choosing pro-active video surveillance. It is equipped with three main features: smart dual illuminators, active deterrence, and AI. It



can effectively warn off intruders with active deterrence, and notify users in time with real-time alarm, making it suitable for areas and properties that require 24/7 security, such as villas, shops, warehouses, etc. TiOC offers three illumination modes: IR mode, warm light mode and smart illumination mode, the default mode, which switches the lighting between IR and warm light depending on the situation. When a target is detected, the IR light will switch to warm light, and when the target enters the rule area, the alarm will be triggered (Active Deterrence), which will activate the siren. TiOC utilizes Dahua's full-color technology that captures full color footage of the monitored scene even in a dark environment or at night.



PERIMETER PROTECTION

Dual Sensor Video Analytics

Video Processing Inside the Camera Compares Signals from Thermal and Visible Sensors

Dual Sensor Analytics (DSA) is an innovative video analytic capability developed by Sightlogix to improve intruder detection reliability for smart cameras used outdoors. DSA intelligently compares the results from both thermal and visible sensors simultaneously to deliver trusted alarms in difficult outdoor situations.

Sightlogix has always maintained that thermal video is the best detector in the outdoors, while visible video offers important details to assess the source of an alarm. We also believe that video processing – at the edge, inside the camera – is a foundational requirement for making video analytics a reliable detector outdoors.

DSA leverages these capabilities, using enhanced processing to automatically cross-check thermal and visible detections in real time, delivering what customers value most—outstanding intrusion detection regardless of conditions.

How Dual Sensor Video Analytics Works

Smart cameras are designed to detect movement – but outdoors, everything moves, which can trigger excessive alarms or outright mis-detects for systems not built for outdoor applications.

For example, if a visible camera is used to detect intruders, a car's headlights passing through its field of view may trigger an alarm. This also happens from reflections or puddles, which trick a visible camera into sending a false signal. This is why thermal cameras have become the solution of choice for video analytics outdoors, because they ignore headlights and reflections and see through darkness, rain and snow to detect intruders that a visible camera would miss.

At the same time, there are circumstances where visible cameras play an important role in verifying an alert. For instance, when a thermal camera detects the presence of a person along a perimeter, a visible camera can add important context to help verify the alert.

Dual Sensor Analytics solves these challenges by automating the best results of both sensors to intelligently confirm or reject each other in real time. The result is a highly capable system that reduces false positives and increases detection reliability under difficult conditions. DSA builds trust in the system – when a camera with DSA sends an alert, it's likely to be an actual threat, and operators can react quickly.

Notably, while Sightlogix makes it easier to implement with a single click, under the hood DSA is not a trivial capability. Comparing and contrasting detection results from both imagers in real time, over many frames per second requires tremendous video processing – a foundational capability built into every dual-sensor smart camera from Sightlogix.

Benefits of Dual Sensor Video Analytic Protection

SightSensor cameras utilizing DSA technology deliver the promise of using smart cameras to protect outdoor assets with the same performance and trust of an indoor system, providing many benefits:

- Smart simultaneous comparison of scene details for outstanding detection reliability.
- Reduced false alarms from common outdoor motion and activity.
- Reduced cost and complexity instead of mounting multiple devices, DSA combines two cameras into one.
- On-board video processing gives accurate detection, manageable nuisance alarms and extended range, meaning higher security reliability and less costs.



Sightsensor HD

- Reliable operational awareness during the day utilizing the visible video and superior detection at night provides a complete 24-hour security solution.
- Easy to use, remotely configurable interface with one-click dual-sensor analytics and auto-calibration
- Plug-and-play connectivity with dozens of video management systems and alarm automation software

Sightlogix Security Customers

Sightlogix Dual Sensor Video Analytics have a proven track record of providing a high level of security for outdoor applications such as Remote Video Monitoring, construction sites, fenced yards at car lots and rental sites, schools and sports fields, large residential sites and cannabis sites.

When looking for a complete 24-hour security solution that provides the highest Sightsensor TC

level of detection performance, Sightlogix is a suitable Solution.

CONTACT

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NDAA-Compliant Network Video Recorder

Idis has enhanced its range of enterpriseclass network video recorders with the launch of a powerful new 64-channel model, the DR-8564. The NDAA-compliant 4K recorder delivers outstanding transmission speed and quality using the latest Intel chipset technology. Boasting an incoming throughput of 540 Mbps and up to 1920 ips UHD real-time recording, the DR-8564 utilizes intelligent codecs to reduce bandwidth and storage requirements, and gives users the assurance of RAID 1, 5, and 10 as well as redundant power. The DR-8564 offers enterprise-level performance, inherent cybersecurity, and critical redundancy, while reducing cost and complexity. It benefits from simple plug-and-play installation and rapid one-click configuration for multi-site deployments as well as supporting ONVIF for third-party camera integration.

www.idisglobal.com

Secure Connected Device Accreditation

Salto Systems has become one of the first electronic access control manufacturers to achieve Secured by Design's new 'Secure Connected Device' accreditation for IoT products. The new scheme enables companies providing IoTconnected products and services to demonstrate that their products have achieved the appropriate IoT standards and certifications from a Secured by Design recognized certification body, working closely with certification bodies who assess IoT products and services against all 13 provisions of the ETSI EN 303 645 standards. The IoT product or service needs to be assessed on an annual basis. Salto Systems MD Ramesh Gurdev says, "Achieving this new accreditation demonstrates to current and potential customers that our connected products continue to meet the highest security standards." www.saltosystems.com



Disturbance-Free Fire Detection System

Siemens' Cerberus Pro range of detection equipment with Asa technology was selected for the Hylo tower, a 29-storey monolith that proudly joins the ranks of London's tall towers. It offers 261,000 sq. ft. of prime office space and was extended from the original 16 floors by a further 13 in 2021. To protect its occupants and effectively manage any potential fire event, GBE:Converge was selected by construction firm, Mace, to design, install and commission the tower's fire detection system using Siemens' advanced fire detection products. The basement and lift shafts proved a challenge for accessibility and future maintenance using point detection, the team therefore including aspirating smoke detection in these locations. Central to the design was Siemens' Cerberus Pro control panels and range of C-Net devices, which provided an L1 category of detection to meet the British Standard Code of Practice BS5839-1:2017. www.siemens.com



One Solution

for All Needs

Future-Proof Access Control

with Mobile Technology

The smartphone is ubiquitous today and is taking on ever more functions, from being an alarm clock to a navigation system. Increasingly, it is also replacing the classic ID card in access control, although it is not possible or practical to replace cards based on RFID (Radio Frequency Identification) by mobile credentials everywhere. To provide the maximum flexibility, a modern solution should therefore support both RFID and mobile technology. At the heart of this are versatile readers.

Gontactless applications based on RFID have established themselves in access applications to create security for assets and for people. For a long time, RFID transponder cards were considered the identification medium of choice when it came to granting access to defined areas just to people with the appropriate authorization. But a change is emerging here: digital credentials, socalled mobile credentials, on smartphones or in the form of wearables are becoming increasingly popular in access control.

For the users, this eliminates the need to carry an additional physical credential which, unlike the ever-present smartphone, can be more easily forgotten or lost. Digital badges also have a number of advantages for access control system operators, among them that no keys or cards need to be handed out. Since the badge is loaded directly onto the user's smartphone, it can be easily blocked in the event of loss or theft and replaced later. It is also quick and easy to issue authorization for different user groups, such as visitors, customers, service providers or guests. These authorizations can be limited as required to the premises and to the times during which they may be entered.

Two Standards

Two different transmission standards can be used for mobile access control. Users usually need an app on their cell phone for the BLE (Bluetooth Low Energy) standard – for example, a hotel app replaces the room key. BLE can also be used wherever a longer reader range is required, such as when opening parking garage barriers.

Unlike BLE, NFC (Near Field Communication) does not always require a manufacturer-specific app. Instead, the access authorization can also be stored as a mobile passport directly in the smartphone's encrypting wallet where a Mifare DESFire card is emulated. This results in a reading distance of a few centimeters, as is common for such cards. Such a solution is therefore ideal wherever classic access applications are used. NFC is also particularly suitable for temporary access authorization, such as for visitor badges.

Hybrid Systems

Even though the trend towards smartphones is clearly visible, the access card is still used, especially since many companies also use the card as an employee ID. If companies or institutions want to be flexible in their access control and be able to use both options, a solution is needed that supports both analog and digital credentials.

The parallel use of RFID cards and smartphones is particularly useful wherever access is to be granted to heterogeneous user groups. One example would be the campus of a university where employees, such as lecturers, can be granted access with a card while students, visitors or service providers use their smartphone for authentication. Whether for events, in hotels, or on cruise ships – a hybrid solution is the best option in all industries where an access control system must conmades: Sesan



Readers from Sesamsec can future-proof access control systems

veniently provide security and function for different groups of users.

At the heart of such a hybrid solution are access control readers that work with both smartphones and cards. But in addition to mobile technology, versatile readers should also be able to process a wide variety of transponder technologies. After all, not all RFID cards are the same. Companies or organizations with several - possibly even international - branches often use different transponder technologies at each location to regulate access to the building; this is very often the case when systems have grown over a long period of time. So to nevertheless be able to provide simple and cost-effective access for different user groups, such as employees, visitors, or service providers, a versatile solution is

required that can be adapted to the needs of a company and its facilities. Multifrequency readers are available on the market that support up to 60 other transponder types in addition to BLE and NFC, and are certified for use in up to 110 countries worldwide. Such a broad spectrum ensures that the operators of access control systems are prepared for any new requirements that may arise, for example as a result of new technology or newly added user groups.

Migrating to a Future-Proof System

Companies or organizations that want to future-proof their access control system and enable the use of mobile technology do not necessarily have to install a completely new system – it is also possible to migrate an existing reader system. This is because existing readers can be replaced by new, versatile readers to meet both current and future requirements. The wiring and other components of the system can usually be retained. Solution providers in access control and intrusion detection technology, such as Sesamsec, can support building operators during the migration and show them their options for the changeover.

Hybrid Sense

In addition to the classic card, the smartphone is becoming increasingly important as an identification medium in access control. Which of the options is used depends largely on the needs of the users and operators. A hybrid system that works with both smartphones and cards therefore makes sense, particularly when an access control system is used by different groups of people. This calls for versatile readers that support NFC and BLE in addition to various RFID transponder technologies, and thereby provides a solution for all user groups. In this way, not only can newly installed access control systems be future-proofed, but existing ones can also be modernized.

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Intelligent Key Management Solutions

Traka, part of the Assa Abloy Group, attended two recent security shows to unveil what the company is calling the 'next evolution' of intelligent key management solutions. Traka Touch Pro was first presented at Global Security Exchange in Atlanta, USA before being displayed at Security Essen in Germany. The new product has four systems in the range, differing in size to meet bespoke customer requirements. Its flexibility in design offers an impressive storage capacity to accommodate larger key sets. Live displays showed the enhancements that have been made, from increasing the useable storage space to improving the cabinet's sturdiness, all put together in a stylish new and uniform design. Assa Abloy's focus on sustainability is upheld as it is built with 100% recyclable materials and manufacturing techniques to reduce the environment impact and carbon footprint. www.traka.com

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SPECIAL FOCUS: SECURITY FOR BANKING

From Bollard to Smoke

Protecting Bank Offices, Branches and Assets is an Uninterrupted Challenge in 2022

etails provided by the Deutsche Bundesbank (German national bank) show that the number of branch offices reduced significantly by almost 10 % in 2021. As in the previous year, the Corona pandemic and the increasing use of online banking by customers have had a catalysing effect. A continual program of cost reduction has inevitably meant the closure of many smaller, 'unprofitable' branches, while the transformation from personal service to largely self-service locations has already been in full swing for a couple of decades and appears to be accelerating.

Ink Cartridge in ATMs that Ruptures to Stain Banknotes

The resultant proliferation of 'hole-in-the-wall' ATMs brought a new type of crime to the fore, internationally, that of blasting cash dispensing machines apart to steal the money within. The methods used by these well-organized and internationally active criminals vary from cumbersome and crude - like driving an SUV through the window and chaining it to the ATM to tow it away - to downright devious - like filling the machine with gas and igniting it from a 'safe' distance. In both cases, significant physical damage is caused, and more than one crook has been injured by his own dirty deed in the process. Much worse, the lives of innocent people are put at risk. So a combination of physical and technical solutions is required to combat these ham-fisted attempts to steal cash. New cash machines are nowadays encased in a shell of reinforced concrete and fitted with **SPECIAL** an ink cartridge that ruptures to stain the banknotes if there is an **FOCUS** explosion. The cost of these measures is, however, not commerically viable for every location.

Preventing a vehicle from even reaching the vicinity of GIT SECURITY previously reported on some security systems for the banking industry back in September 2011. Since then, the industry has gone through mergers, closures, trading scandals, financial crises and market crashes and also, thankfully, periods of steady business. All these different aspects put pressure on the industry to cut costs and reduce losses.

an ATM can be easily achieved by fitting (retractable) bollards in the way that are designed for the job. New Zealand and Australia are currently going through a phase of increased 'ram-raiding' of shops and banks – very succesfully from the thieves' point of view – mainly because the bollards and shutters that have been installed so far are too flimsy. BGI Europe, based in Athens, have a range of protection-rated electric/pneumatic bollards that not only look good but also reliably prevent vehicles from getting past. Bollards certified in accordance with the international ASTM2656, PAS68 and IWA14 security standards are also available from Tiso in the Ukraine. Their range includes fixed, manual, or automatic bollards as well as road blocking ramps or 'cyclops' vehicle stoppers. Both manufacturers can link their installations to various third-party trigger systems such as video surveillance or alarms.

Another method of preventing 'ram-raiding' is to fit resistant shutters behind or, preferably, in front of windows. Lockdown Shutters manufacture tailor-made solutions that support further measures to prevent vehicles from entering buildings. Anti-ramraid shutters and grilles are also manufactured by System 2000 in the UK.

Simple Intrusion Prevention: Bright Lights

In the case of 'conventional' break-ins – illegal personal entry to the property – microwave, ultrasonic, or infra-red motion detectors as well as hidden contacts, invisible beams or video analytics can all detect someone where they are not supposed to be (refer also to the comprehensive GIT SECURITY video analytics test in our last issue). The Japanese Optex Group has a wide range of sensors that use a variety of detection methods as part of a complete building security solution to discover uninvited guests. Sensor solutions from Honeywell Security also include methods to counter attempts to put the sensors themselves out of action. Their range includes long-range and dual-technology detection, together with comprehensive, multi-faceted security solutions.

Sometimes 'simple' is also an effective deterrent, for example a system that just switches on bright lights when motion is detected out of hours – thieves prefer not to be seen. Also ask a gardener to plant some dense, spiky bushes outside vulnerable windows – thieves may arrive equipped with glass-cutters or hacksaws, but they probably won't have brought grandma's secateurs with them!

Emergency Notification and Crisis Management During Opening Hours

Banks are constantly reminding us in their advertising that they are open and welcoming, which inevitably means open front doors - with all the security risks that that presents. So the public areas require no access control while administrative areas must remain secure even when the front door is wide open. Although it is unlikely that Bonnie and Clyde will storm in, guns blazing, to get their sacks filled with cash, bank robberies may still happen ninety years later, so silent and secret alarms are a fundamental necessity. The Munichbased F24 Group specialize in providing just such emergency notification as well as crisis management services internationally to certified standards.

Of course, access to parking, the lifts, and staff lockers must also be considered. In addition, banks have

to comply with the relevant national identity verification regulations regarding access to data, cash systems and IT hardware. Ideally, this is all discreet as well. Conventional access control with enhanced security measures solves this apparent contradiction while validating staff, monitoring movement and completely controlling access to rooms, areas and equipment. Cards and fobs carried by staff are versatile and easily managed for example, while secondary validation techniques such as fingerprint or iris scanners may be incorporated into the management platform. Stanley Security conceive a tailor-made system for their clients that fulfils their customers' requirements while also taking the specific physical building attributes and assets into account. Their comprehensive solution will ensure the full integration of video surveillance, intruder detection and access control as well as rob-



BGI Europe, based in Athens, have a range of protection-rated electric/pneumatic bollards that prevent vehicles from getting past

bery alarms and fire detection. Genetec's Security Center is a unified security platform that merges IP-security systems into one intuitive platform, combining video monitoring, access control, license plate recognition, intrusion detection, and analytics into one solution. Their dedicated solutions for the banking industry cover every requirement of security, connectivity, and management.

Visually Impenetrable Barrier: Flood the Bank with Safety Smoke

If, despite all measures, we are not able to keep intruders out of a bank branch, or assailants taking action during opening hours, then we can make life extremely difficult for them by suddenly reducing their visibility so much that they cannot act as planned. Concept Smoke Screens can provide extremely quick-acting and effective fog machines that flood a property with harmless, dense smoke. To quote their web-

> Bollards certified in accordance with the international ASTM2656, PAS68 and IWA14 security standards are also available from Tiso in the Ukraine

site: "Security fog is a non-violent, confrontational, visually impenetrable barrier". Smartek's Nubi 4.0 generates a safety smoke screen, blurs the visibility and creates a very hostile environment for thieves whose first priority will then be to make a rapid getaway. The Concept control units of these systems couple with alarms of all sorts, and have IP connectivity for status monitoring and activation while Smartek's also integrate with alarm systems and have a wireless option.

Multi-Site Security Management

Centralized management and supervision of branches is relatively simple to realize these days. Providing the right tools to ensure the security of a branch without any loopholes though requires careful planning and implementation. The integrated multi-site security management platform from Pacom provides integration between access control, alarm monitoring, video surveillance, the elevators, intercoms, fire alarms, building automation and any other relevant systems. Intelligent self-testing, component redundancy, multiple backups and remote disaster recovery keep the centralized operator's workload light.

Together with its commercial partners, the Swedish manufacturer Axis Communications supplies comprehensive security solutions worldwide that are built around their video surveillance and image analysis equipment. Their analytics package can, for example, even track the amount of time an object remains in a particular area, which might highlight some devious deed in progress. Using the Optimizer accessory, the company's products can also be deeply integrated into an overarching video management system such as XProtect from Milestone Systems. Amongst many others, this has the added advantage of being able to detect and deter intruders and suspicious behavior, managing personnel and vehicle access, as well as visualizing the input from over 10,000 other compatible third-party products.

While Bonnie and Clyde got their comeuppance during a carefully-planned police operation back in 1934, there will most likely not be a similar scenario anytime soon. The onus these days is very much on the bank's own security team and the ATM operators themselves to prevent crime, rather than the police chasing the villians off down the street. The technology is available today to reach a very high degree of protection against misdeeds and, together with the advice of the partner company of your choice, it can provide safety and security for staff, equipment and assets. Some potential suppliers are shown below.

> Author: David Jayne

Suppliers

Axis Communications I www.axis.com BGI Europe I www.bgi-europe.com Concept Smoke Screen I www.smoke-screen.com F24 Group I www.f24.com Genetec I www.genetec.com Honeywell Security I www.security.honeywell.com Lockdown Shutters I www.lockdownshutters.com Milestone Systems I www.lockdownshutters.com Optex Group I www.optex-europe.com Pacom Systems I www.pacom.com Smartek I www.smarteksrl.it Stanley Security I www.stanleysecurity.com System 2000 I www.system2000group.co.uk TiSO Ukraine I www.tiso-blockers.com RESPIRATORY PROTECTION

Safety on Board

Dräger Respiratory Equipment in South Africa's Boatbuilding Industry

The company "KZN Leisure Boats" in Durban builds, repairs, and restores boats. The work with glass-fibre reinforced plastics offsets hazardous dust particles and fumes. Respiratory masks are used to protect the workers' health.

Rays of sunlight are shining into the manufacturing hall of "KZN Leisure Boats" in the docklands of Durban harbour. Tiny dust particles are floating in the light, a smell of resin hangs in the air, grinding noises add the soundtrack. All kinds of fiberglass boats are on the floor: From recreational fishing boats to powerboats to those of South Africa's National Sea Rescue.

Workers are busy laminating new fiberglass hulls and repairing damages. Everyone is wearing face masks to protect their lungs against the dust, says Yugeshni Naidoo, the owner of the company. "These dust particles contain fiberglass and that is really bad for the lungs. This is the air we are breathing in every day. It's dangerous. So, we have to be masked all the time." Especially the smaller fibres can reach the lungs, remain there, cause and aggravate respiratory diseases.

Yugeshni Naidoo is wearing a Dräger FFP2 dust mask while she checks on the progress of the work. She was using a generic brand product with ear loops before but noticed that air got in from the sides. The new masks in comparison fit perfectly and seal properly. In the past, her employees had also regularly lost masks on the floor by accident. "But with the Dräger one, you drop the quick release fastener on the back, and it hangs from your neck. So, you've got it the entire day and you're safe. It sounds simple, but it helps when it comes to costs." She now pays for one mask instead of several a day.

At first affordability was one of her main concerns, JP Dantuma recalls. He is Dräger's regional sales manager and understands how tight the budget for many companies is in South Africa, especially in the current economic downturn. "Yugeshni is the sole owner, so she cannot go and spend thousands on PPE. Obviously, she wants the best for her staff but at the right price. This is where our products stood up against our competitors", he says. The disposable dust masks are not the only Dräger product the 38-year-old businesswoman decided to use.

"The Safety Equipment Must Not Hinder Your Job"

In the back of the hall, four of the eleven employees are working on a new boat. The mould has been gel-coated already, now fiberglass mats and resin are applied layer by layer. They are using a low fume resin, but the smell is still strong. Luckily not for us anymore, says Maxwell Jara. He is wearing a Dräger X-plore 3500 half mask, which is renowned for its perfect seal. "As soon as I put it on, the smell is completely gone. I also noticed that I don't have headaches anymore after a day's work", says Jara. Combination filters against gases and particles prevent breathing in the aggressive fumes and fibreglass dust. As soon as one starts smelling them again, it's time to replace the filter. Jara demonstrates how easily this is done and also adds, that he feels comfortable wearing the mask all day long. "It is light and seals perfectly".

The DrägerFlex material is soft and skin-friendly, the head strap ensures an even distribution of pressure and a solid fit. In her business comfort is not only nice to have but a necessity, Yugeshni Naidoo stresses: "Your safety equipment must not hinder your job". She watches how her workers are applying fibreglass and resin, using laminating rollers to spread the resin evenly. "This part of the boat is very important: You have to move fast, the resin gels, which means it gets hard. So, it is crucial for them to be comfortable and able to manoeuvre easily". The perfect, tight yet comfortable fit is also important for applications where the space is restricted, she explains further. "This mask doesn't slip off the head. It has enough support to stay on even in the hatches".



Maxwell Jara applies fiberglass mats and resin layer by layer. He is wearing a Dräger X-plore 3500 half mask with combination filters.



Yugeshni Naidoo is wearing a Dräger X-plore 8000 Powered Air Purifying Respirator combined with a hood worn over a bump cap thus protecting head and eyes.

Fiberglass particles and resin fumes are not the only occupational health hazards in the boatbuilding industry. Grinding and spray-painting are also part of the process and expose workers to more toxic dust and fumes. They are not only detrimental for the lungs but can also cause skin rashes and inflammation of the eyes. That's why Naidoo decided to invest in a third set of Dräger products: The X-plore 8000 series Powered Air Purifying Respirators combined with a hood worn over a bump cap thus protecting head and eyes. They are worn on a belt around the waist, automatically select the correct airflow to the hood and offer a big field of vision.

Again, it is the attention to detail which makes the design unique, says JP Dantuma. He mentions the bump cap inside the hood as an example: "If a worker has to lie underneath the boat with a spray gun and for whatever reason gets up too quickly, if he knocks his head against the hull of the boat, he will still have a bump cap to protect his head." A long battery life is an added advantage, especially in a country like South Africa which is experiencing regular power cuts.

For Employees Dräger Masks are Simply "Life-Changing"

For employees like Michael Kambula, who has been building fiberglass boats for 25 years, these masks are simply "life-changing". He has been suffering from tuberculosis in the past, like many South Africans, and has to take extra-care of his lungs. "These masks are really great. An acoustic signal alerts you when the filter gets clogged. The air you breathe is always fresh, clean and cool", he says.

Especially in the hot and humid Durban summers, this is added benefit, according to Yugeshni Naidoo: "If we are laminating or gel-coating a new boat and one drop of sweat falls into the mix, it

JP Dantuma, Dräger's regional sales manager, and Yugeshni Naidoo



will create a bubble. So, to be cool helps." Obviously, there shouldn't be any bubbles in the hull of a boat, which create weak spots and could ultimately endanger the safety of the people on board. Quality and safety are essential in all aspects of this business.

In South Africa though, workers safety had long been neglected. When JP Dantuma started working for Dräger almost 22 years ago, there was no legislation around respiratory devices. "You could just sell any and everything", he says. This changed in 2003, when a law was passed that any respiratory equipment had to be locally homologated. "Companies had six years to get their paperwork in order. Things have evolved since 2009", explains Dantuma.

"I Still Want to Breathe Properly When I am Older"

Always, when speaking about the awareness for the health risks that boatbuilders take, Yugeshni Naidoo is reminded of her late father, who founded the company. "Back in the day, there was no safety, nothing. He used to spray-paint with no mask and no one highlighting: You're cutting your lifespan short". Her dad was in his mid-sixties when he passed away last year. He had been battling with his lungs for long, his daughter says. "He died of emphysema, which means he couldn't get enough oxygen into his lungs". She is convinced that this closely related to years of unprotected work with hazardous materials.

Occupational safety is a sensitive, personal issue for her: "I think people are lackadaisical about it. But it's important, because I still want to be fit and breathe properly when I'm much older. So, it starts now, being masked correctly". The same applies to her workers, she often reminds them to wear their masks. "I don't want their job to be the reason that their health deteriorates".

This said, she is glad, that JP Dantuma stepped into her factory one day to present the Dräger range. For him, she's a unique client: "You have a variety of applications, a combination of different types of respiratory devices used under one roof, where for most of our clients it will be one or the other." Yugeshni Naidoo cannot stop the offset of fumes or the fibreglass dust particles hovering in the air, but she can now make sure, that they don't end up in her lungs and those of her workers.

CONTACT

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Completely protected – the Kombitast emergency-stop with IP69K is made for mobile machines and special vehicles



Flexible, Safe and Quick to Mount Thanks to M12 Connection

Simple and Safe

Thanks to the M12 connection technology pushbuttons and switches can be integrated into existing systems without complications. Even in the area of emergency-stops, the demand for M12 solutions continues to rise as here, too, the benefits of M12 are convincing: flexible, safe, and fast to mount. Georg Schlegel, a specialist for emergency-stops, has already developed a broad range of emergency-stop types for M12. The latest among them: an emergency-stop with M12 connection and illuminated protective shroud.

The M12 connection technology enables pushbuttons and switches to be easilly connected without great cabling efforts. This does not only save money, but also is much safer: Due to the standardised coding mismating is no longer an issue. Furthermore, M12 plug connections have established themselves as an international standard. The ready to plug concepts ensure a fast installation, true to the principle of "Plug&Work": Plug it in, and done.

Schlegel early aligned its development to this trend and established pushbuttons and switches with this connection technology. "Customers do no longer want a complicated wiring that is prone to mistakes. The connection technology needs to be as simple, safe and fast as possible. This is what M12 connections offer," the product manager of Georg Schlegel, Torsten Singer, says.

In the case of emergency-stops safety is a topic of especially great importance.

From malfunction to faulty operation of a machine – when a dangerous situation appears, pushing an emergency-stop prevents damage to human and machine.

Georg Schlegel is offering a comprehensive range of emergency-stop devices allowing to fulfil the requirements of typical applications of different branches – ranging from the machine building industry, plant engineering up to the lift, vehicle, shipbuilding and crane building industry. Suitable M12 variants are available for the common 22.3 mm and 30.5 mm installation openings. The "connect" series with directly integrated M12 connection are suitable for space-saving installation. If cables are required on the customer side, the "M12" series are suitable.

For More Safety

The latest development regarding emergency-stops of the company from Duermentingen is called QRBLUVOOI_C1190. The illuminated protective shroud is a plus for safety: In a normal condition the emergency-stop is not illuminated, if the button is activated, the LEDs that are integrated into the shroud light up. This immediately indicates where the emergency occured. In addition, the illumination function is quite flexible and can be set according to customer's wishes or used in reverse function.

The emergency-stop of the Quartex connect series can be used for a panel cut-out of 22.3 mm and convinces with its low mounting depth of 27.5 mm which is possible thanks to the integration of the M12 connection in the housing neck of the emergency-stop. The M12 connection has 5 poles and is A coded. The QRBLUVOOI includes 2 NC and 1 NO contacts and has a long life with 50,000 switching cycles being guaranteed. Its degree of protection is IP65 in the front and IP54 on the rear.

Further Quartex connect emergencystops are already planned: A variation of the QRBLUVOOI_C1190 with key release and an emergency-stop without illumination.

IP69K Emergency-Stop

The new Kombitast emergency-stop with M12 or Deutsch plug is made for mobile machines and special vehicles that have to withstand difficult environmental conditions. The emergency-stop has the highest degree of protection of IP69K on the front and is therefore protected against dust as well as water and can also be exposed to high-pressure cleaning. Thanks to the encapsulated design on the rear we guarantee a degree of protection of IP65 if the cable is connected. On its inside a Gore sealing prevents the penetration of moisture, but at the same time allows for air to exit - this is important to ensure the reliable function of the emergency-stop.

Furthermore, the plastic material being used is suitable for outdoor conditions: The emergency-stop is resistant to UV light so it will not pale out in the long term but will keep its bright yellow colour – which can be decisive in the case of an emergency.

The Kombitast M12, a joint development of Georg Schlegel and Data Panel, has 2 NC contacts and can be used for a panel cut-out of 30.5 mm. The M12 connectors with stainless steel screw are 4-pole and A-coded and have a vibration protection. The emergency-stop has an anti-lock collar, a status indication and is available with a 25 cm or 150 cm cable.

Small and Compact

The emergency-stops of the Shortron connect and Shortron M12 series are designed for a panel cut-out of 22.3 mm. Shortron connect is characterised by a particularly small and compact design.

Schlegel has also expanded the portfolio for the Shortron series significantly. The latest developments are our FRVKOO_C111 and FRVKOO_C1112. The M12 connections of these emergency-stop variants have 5 poles and are A coded, the pin assignment is based on Aida. As usual for this series, the degree of protection in the front is IP65/ IP67 and – with connected cable – IP65 on the rear. The FRVKOO_C111 has 2 NC contacts, the FRVKOOI_C112 has 2 NC and 1 NO contacts.

5-Pole Connector

This year Schlegel also developed new emergency-stops with M12 solution for a panel cut-out of 30.5 mm. The two

variants of the Kombitast series have a 5-pole M12 connector. Schlegel offers the KRVKOO_C111 with 2 NC contacts and the KRVKOOI_C112 with 2 NC and 1 NO contacts. The M12 connections are A coded and the pin assignment is based on Aida.

Both emergency stops have a degree of protection of IP65 in the front and on the rear and a lifetime of 50,000 switching cycles. The voltage and current values of the M12 variants are 35V and 2A AC/DC.

All emergency-stops of the "connect" and "M12" series are in accordance with the standard EN ISO 13850 and have positive opening contacts according to the standard EN 60947-5-1.

CONTACT

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Enhanced Locker Management

Nedap Security Management has introduced Aeos Locker Management, a flexible, intuitive, and intelligent solution. With more people now working in hybrid roles with variable working hours, the need for secure and flexible storage space is growing. The intelligent locker management system works can manage and secure an unlimited number and variety of lockers, from asset management to storage. A locker can be assigned to one specific person or multiple authorized individuals. The lockers are easily unlocked and secured using a badge, mobile phone, QR or biometric code. www.nedap.com





LiDAR Sensors

The Qb2 smart LiDAR from Blickfeld makes perimeter protection even easier and more efficient. The Munich-based manufacturer of break-through LiDAR sensor solutions has started delivery of its Qb2 device to customers and partners. This enables the capture and processing of data on a single device, removing the need for additional computers and bringing faster insights, improved response times and better bandwidth availability via edge computing. In perimeter protection, companies benefit from high efficiency gains through enriched, actionable real-time 3D data automatically fed into their IT systems or the cloud. Furthermore, installation and maintenance costs and effort are kept low due to the on-device WiFi connectivity. Qb2 offers an enhanced adaptable field of view (FoV), detection range and scan pattern, plus higher resolution, accuracy and an IP67 rating.

www.blickfeld.com

The system organization/hazard management system, based on WinGuard, bundles all the information about a property's safetyrelevant systems into one user interface

Holistic Fire Protection Solutions

FIRE PROTECTION

Wagner Presented Its Portfolio at Security Essen Show 2022

Titanus aspirating smoke detectors form the basis of every individual, holistic fire protection solution. They detect fires at a very early stage so that appropriate countermeasures and protective measures can be initiated quickly. Markus Kock, managing director of Wagner Deutschland, explains the current market situation: "Delivery problems due to disrupted supply chains and material shortages are challenges currently facing many manufacturing companies. Thanks to forward planning and stable supplier relation-

ships, we have been able to meet customer requests in this important fire protection segment in recent months. We are also well positioned for the future together with our partners. We were therefore able to show a large selection of our aspirating smoke detection systems in various designs with a wide range of accessories. They are particularly suitable for use in warehouses/ logistics, data centers, production, archives or museums, or hotels."

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Prevention & Protection

Based in Langenhagen near Hanover, Wagner showed its holistic solutions for individual fire

protection at the recent Security 2022 in Essen. The highlights of the company's exhibits were the Titanus aspirating smoke detection systems

for early fire detection and the organization and

hazard management system based on WinGuard.

Wagner's customers can achieve perfect organization of all safety-relevant systems by using the hazard management system based on WinGuard. As an open software platform, all the building technology, communication and security systems are integrated into a uniform user interface, irrespective of the manufacturer. Wagner's fire protection experts gave trade show visitors insights into the system's user interface and functionality at Security 2022.

Visitors also had the opportunity to find out about the company's active fire prevention solutions, such as the OxyRe-

duct oxygen reduction system and effective fire suppresion with the FirExting gas extinguishing system. The VdS-certified systems minimize fire risks or fight fires early and without leaving residues. Numerous reference installations show how these

systems look in practice.

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Titanus aspirating smoke detectors form the basis of holistic fire protection solutions ►

FIRE DETECTION

There's Something in the Air ...

Patol Provides Fire Protection for a Major Online Retail Investment

Fulfilment centers are the latest development designed to help revolutionize online operations as the retailer seeks to meet huge growth in internet-based sales. The pandemic contributed to a sales increase of almost 60% in the run up to Christmas 2021 compared to 2019. One of the UK's best known supermarket chains has chosen Patol and Securiton aspirating smoke detection (ASD) to protect a significant investment in expanding the retailer's online offering.

gainst this backdrop and with a general upturn in online grocery shopping, the supermarket has embarked on a program to develop a number of facilities throughout the UK, with dedicated automatic picking areas completely separate to the customer areas introduced in its larger stores where excess space is available. Protecting these facilities from the threat of fire is of paramount importance. Alarmtec, a supplier of fire alarm systems for over 40 years, approached Patol, a company that has specialized in the design, manufacture and supply of fire safety products and services for more than 50 years.

Air Sampling

Alarmtec had employed ASD in a large warehouse project and recognized the potential it offered in meeting the needs of the fulfilment centers. Alarmtec and Patol worked together, along with the retailer's own dedicated engineering department, to design and develop a turnkey solution. The first store was in West Bromwich and a template was created for the fire alarm system to protect the center. Patol's ASD was chosen to provide early warning of fire, with the pipework installed throughout the ceiling voids and racking areas. The detectors are located to allow easy access for maintenance which would have proved



difficult with conventional point detectors. The early warning provided by ASD also proved a significant advantage given the increased fire load represented by the electrical motors which drive the automated conveyors at the heart of the picking area. The ASD is supported by Patol's digital LHDC (Linear Heat Detection Cable) which monitors the chillers and freezers.



Patol's ASD panel and digital linear heat detection cable ensure early warning of fire

The air sampling pipework and detectors provide dedicated protection of the West Bromwich fulfilment center area, networked to the store's existing fire control panel and sprinkler system. The success of the West Bromwich facility provided the blueprint to roll-out the solution to other stores.

Challenge Met

Jeff Hickling is Head of Installation at Alarmtec and comments, "We recognized that ASD provided the ideal solution to meet the challenges of the project, with its ability to identify a potential fire at the earliest possible point. Patol's technology provides the performance we were looking for, backed by an excellent level of service." The fulfilment centers are designed to allow faster picking and quicker deliveries, adding to an extensive network of distribution facilities and in-store picking. It will expand the company's online capacity, providing customers with more home delivery slots, as well as reducing congestion on shop floors.

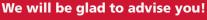
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Security Management



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Security Management

Security Management



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We will be glad to advise you!



Video Technology



BURG-GUARD GmbH

Wormgermühle 1 - 58540 Meinerzhagen Tel. +49 2358/905 490 - Fax +49 2358/905 499 Burg-Guard@burg.biz - www.burg-guard.com Video monitoring technology - Video-over-IP Outdoor IR sensors - Planning and Services



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Imprint

Published by

Wiley-VCH GmbH A Company of John Wiley & Sons, Inc Boschstrasse 12 · 69469 Weinheim GERMANY

Tel.: +49 (0) 6201 606-0 · Fax: -791 info@gitverlag.com · www.gitverlag. com

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GIT SECURITY is published 4 times per year.

Subscription 2022

4 issues 55.00 €, single copy 16.30 € plus postage. Pupils and Students receive a discount of 50% at sight of a valid certificate. Subscription orders valid until cancelled, notices 6 weeks before end of the year. Subscription orders can be revoked within 1 week in writing. Dispatch complaints are possible only within 4 weeks after publishing date. The publishing house is granted the exclusive right, with regard to space, time and content to use the works/ editorial contributions in unchanged or edited form for any and all purposes any number of times itself, or to transfer the rights for the use of other organizations in which it holds partnership interests, as well as to third parties. This right of use relates to print as well as electronic media, including the Internet, as well as databases/data carriers of any kind.

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Print run: 20,000



Printed by westermann DRUCK | pva Printed in Germany | ISSN 2190-4367

WILEY



Name: Andre Witte

Position, Company: Head of Corporate Security; Borussia Dortmund GmbH & Co. KGaA (Professional soccer club in Germany)

Hometown: Cuxhaven, Germany

Favorite homemade dish: Oldenburg green kale cabbage with grit sausage, smoked pork, and pumpkin

Right now: I am thrilled about the next UEFA Champions League trips and our upcoming marketing trip to Asia with the licensed players.

When I'm stressed, I am able to move my left leg up and down in googolplex speed.

My biggest struggle on a workday is to constantly imagine and prepare for 'unknown' and 'unlikely' events to proactively maintain options for action in case of any arising threat or danger.

I can never resist a legit glass of original Coke – no ice, one slice of lemon. Best!

My biggest motivation is the daily challenge to think dynamically with regards to all facets and determinants of risk perception and mitigation.

At 7 o'clock in the morning I try my best to follow my daily wake-up routine – push-ups with my daughter on my back. If you ask how many, I'll answer all of them!

The natural talent I would like to be gifted with is a highly superior autobiographical memory.

Guaranteed to make me laugh is my snail joke: "A man sees a snail on his windowsill and throws it out of the window from the first floor. After three months, the doorbell rings. It's the snail saying, What was that all about?"

Three characters I would like to have dinner with (dead or alive, fictional or non-fictional) are Carl von Clausewitz, Niccolò Machiavelli, and Sun Tsu.

Three things that I am most grateful for in life are family, perseverance, and health.

The best decision in my career so far was to not linger one-dimensionally without progress.

If my life was a movie, I would be portrayed by Vin Diesel in his best Shape – haircut already fits, but he might have to gain some mass for the role.

I am entering the wrestling arena and while the crowd is calling out my wrestling name "Haeppchen – The Machine!", I can hear the song T.N.T. (AC/DC 1976) playing!

At the most horrible job I ever had I was a production helper in steel and metal construction/production line, as a door frame carrier.

The language I would most like to speak is Spanish (Castellano; Kalihna, Galibi)

The biggest challenge for me at the **moment** is to combat the current recognisable dynamic chaotic developments of a digitalised BANI-world whose interactions and uncertainties are not visible and whose consequences are unpredictable - e.g. with methods such as Failure Mode Effect Criticality Analysis.

If I was trapped in a shopping mall for one night, I would throw the biggest Pringles-Chips, Tortillas and Gummy Bears-Party ever.

I would like to have the superhero superpower of reading others' minds, to predict the future like Jean Grey.

My first car was a white 1995 Nissan Micra – classy!

I had the opportunity to shake hands with Kiev's mayor Vitali Klitschko.

Off the Record

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