



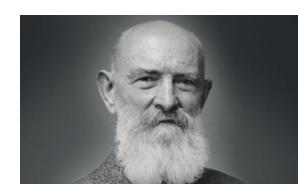
### Our story

With a passion to create a safer and more secure world, our story is one made of many, each as unique as the solutions we provide for our customers. That story begins with you. It begins right here.

Protecting lives, buildings and assets is our aim. Our customizable solutions comprise video surveillance, intrusion detection, fire detection and voice evacuation systems as well as access control and management systems. We are unique in being a true one-stop-shop for any building technology application. Professional audio and conference systems for communication of voice, sound and music complete the range.

"I have always acted according to the principle that I would rather lose money than trust. The integrity of my promises, the belief in the value of my products and of my word of honor have always had a higher priority to me than a transitory profit."

Robert Bosch



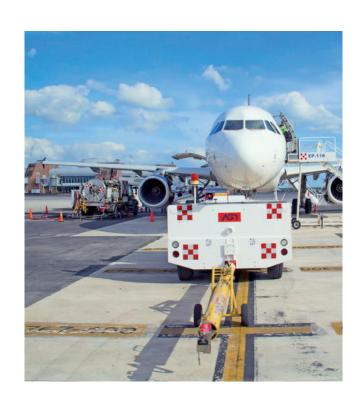
### Solutions for Industries

#### **Airports**

The multiple roles played by today's airports pose considerable security challenges. Managing these challenges is a daunting task, since many different areas need to be monitored: perimeters, parking structures, terminals and other passenger facilities, aprons, airfields, shops, restaurants etc. Solutions from Bosch help airports to master these security, safety and communication challenges.

#### ► Cancun Airport, Mexico

Cancun Airport, Mexico's second largest, added a fourth terminal. To create a centralised, integrated security system, Bosch Video Management System and Bosch Video Recording Manager were deployed. Overall security at Cancun Airport is guaranteed with improved communication and effective coordination. Even as an airport expands, security must never be compromised.



#### Railway & Metro

One of the greatest challenges of the transportation industry is to protect train stations, where the rail industry faces a crucial need to guard passengers, employees, goods, infrastructure, and assets against possible threats. Train stations comprise diverse outdoor and indoor facilities such as tracks, underground passageways, bicycle and car parking areas, buildings, luggage storage facilities, and parked railway cars and engines.

#### ► Helsinki Metro, Finland

A massive expansion of the Helsinki Metro, the Länsimetro extension, has added 14 kilometers of track and eight brand-new metro stops reaching all the way to the town of Espoo. Bosch Praesideo proved the perfect solution to extend the system and integrate the 5,580 new loudspeakers, which are installed in twelve colors and 14 different speaker designs to match the state-of-the-art interior aesthetic. Bringing customer safety full-circle, Bosch Praesideo also interfaces with Helsinki Metro's other security systems.



Bosch creates a broad range of high quality security solutions for all industries. Whatever your security needs, Bosch has an answer. With extensive experience, Bosch is your reliable partner.

#### Multi Store Retail

The retail business is highly competitive and characterized by narrow profit margins. The nature of the retail business means that a large number of people have access to the premises, for instance to deliver merchandise or to shop. The potential risks involved require stores to meet demanding criteria with regard to security, safety, communications, and building automation.

#### ► McDonald's, China

For the new flagship stores, McDonald's China needed a sound system to match the high-end offering. Crystal-clear sound was a top priority, because McDonald's thoughtfully chooses music play lists and sound frequencies to enhance dining experiences at its stores. To provide the appropriate auditory ambiance, each restaurant features a world-class commercial sound system, provided from Bosch.



#### Healthcare

Being hospitals open environments by nature, protection of people and assets must take this into account. Multiple security solutions, fully integrated to offer various dimensions of detection, and coupled to a high quality video surveillance – so that security personnel can easily assess, without any doubts, what is happening in the premises – and act accordingly.

#### ► Adana Integrated Health Campus

This integrated health campus has a capacity of 1550 beds consisting of 3 hospitals. Bosch provides solutions for greater safety, convenience, and efficiency, as well as contributing to the better protection of resources. Bosch is providing a comprehensive safety and security solution all integrated in the Bosch Building Integration System (BIS).

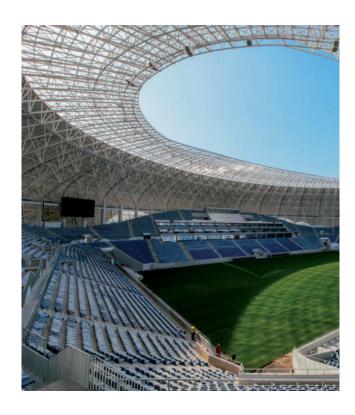


#### **Stadiums**

All entertainment facilities pose security challenges, but sports stadiums definitely top the list. Many modern sports stadiums are multipurpose venues that also host concerts and other cultural events. These facilities, in which thousands of people congregate on a regular basis, have to meet especially demanding security, safety, communication and building automation criteria. With Bosch products and solutions you keep the fans safe and aware of the score.

#### ► Craiova stadium, Romania

The Craiova Stadium with a capacity of 30000 seats is the home court for the football club CS U Craiova and Bosch delivers a full safety and security solution for a large mass event area. The solution consists of a professional sound system of the Bosch brands Dynacord, Electro-Voice and Bosch Security and Safety Systems. The Bosch Enterprise Video Management System combines the IP cameras, video recorders, Modular Fire Panels and fire detectors together.



#### Manufacturing & Production

Security within a factory can mean a number of things. Fire detection is of the utmost importance, as are alarm and evacuation systems that ensure an orderly exit when the situation is critical. Cameras can even be placed inside factory machines to monitor and troubleshoot malfunctions. Ensure everything runs smoothly, safely and securely with the products and solutions from Bosch.

#### ► Mouka Ltd, Nigeria

Mouka Limited is Nigeria's foremost supplier of branded mattresses and foam-based products. Due to using high flammable materials the company required a system that can detect fire and smoke in less than 30 seconds. Therefore they installed 34 Bosch AVIOTEC video-based fire detection systems. Since then, the combination of video-based fire detection and alarm system has proven an asset at all three Mouka production sites.



# Integrate all safety & security products and subsystems on one platform

We offer integrations for all scales of projects. Bosch's integration software BIS is specialized in complex solutions like airports, healthcare, retail, stadiums, transportation and many more. It manages different Bosch security subsystems like access control, video surveillance, fire alarm, public address or intrusion systems on one single platform. The building integration software allows for integration of third party hardware and software via open standards and Software Development Kits (SDKs). Thanks to its modular structure, you can add or remove single elements or create new combinations, which provides maximum flexibility and the solution you need.

No matter how comprehensive and complex your building management requirements are, the building integration software responds flexibly and is also easy to use. It enables the operator to keep the overview in complex building structures like airports, stadiums or manufacturing sites and allows him to react quickly and efficiently in case of an alarm.



- Fire detection systems
- Intrusion systems
- 3 Video surveillance systems
- 4 Access control systems
- 5 Public address/evacuation
- 6 HVAC, lighting, blinds, IT monitoring
- Fence and wall monitoring

### End-to-end solutions with Bosch Security and Safety Systems

Expand business opportunities as our partner with integrated security solutions and increase mutual revenue and profit in a dynamic and innovative security environment with fully integrated, connected, leading edge products and technologies – seamlessly leveraging our and your platforms in designing user relevant application and system solutions. As security IP solution provider, the Bosch Integration Partner Program provides support and services for the integration of key technologies with Bosch system components.

The Integration Partner Program compelling service portfolio helps to differentiate and enhance selling proposition – supported by customized co-marketing and co-selling opportunities.



## Ingredients to our Solutions:

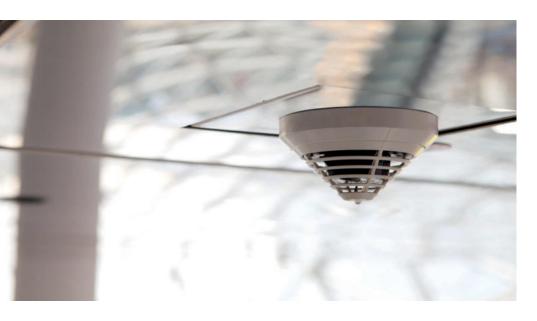
Product Excellence and Broad Service Offering











#### Clamp down on fire

With over 80 years of experience in fire alarm systems, we have products to suit all applications. Our automatic detector series also includes multicriteria and flush-mount variants that offer nearly invisible detection. We supplement these products with highly-flexible, user-friendly control panels, such as the Modular Fire Panel 5000 Series, for coordinating fire alarms and other event-related messages. Our video-based fire detection system AVIOTEC represents a new generation in threat detection capabilities. Manual call points, sounders, strobes and interface modules complete the solution.



### Interfaced fire detection and voice alarm

Having the right building protection system gives everyone peace of mind. Bosch takes an interfaced approach to building protection, offering a combination of proven systems that deliver ultimate performance. From reliable fire detection to advanced voice evacuation, Bosch delivers a safe, future-proof investment for any kind of venue.



### Manage your fire systems secure and quick

Preemptive maintenance is the key to preventing costly false alarms and ensuring fires are detected in time. Remote Connect, Remote Maintenance and Remote Alert enable technicians to be more efficient and effective with their service calls using remote diagnostics – saving costs, assets and lives.





# Public Address and Voice Alarm Systems

Get all messages across, no matter what

With more than 60 years' experience in designing and developing communication products, Bosch has established unrivalled leadership in the field of public address and voice alarm systems. Bosch provides tailor-made solutions and system components for all types of application areas: hotels, shopping malls, office buildings, exhibition centers, convention centers, educational buildings, religious buildings, theatres, concert halls, stadiums, rentals, retail chains, restaurants and bars, airports, power plants, oil and gas, tunnels, metro and railway stations. The systems meet and often exceed legislated requirements for voice alarm systems according to EN54-16 and ISO 7240-16.







#### **IP-connected portfolio**

The latest additions to the product portfolio are IP-connected. All components of the system are networked, thereby ensuring the highest flexibility and scalability from small centralized to large decentralized systems adapting easily to changing needs. Offering full sound control per zone to satisfy the speech intelligibility requirements of business and emergency operations and compliant to the highest standards, they are fit-for-purpose solution for consultants, installers and building owners alike.



### First-rate solutions for every audio application

As a leading global player in the design and manufacture of public address systems, Bosch offers a wide range of loudspeakers that form part of these systems. It has a first-rate loudspeaker solution for every audio application, including EN54-24 certified voice alarm, speech and background music, as well as foreground music and professional audio. The portfolio includes: Cabinet Loudspeakers, Column Loudspeakers, Active Line Array's, Ceiling Loudspeakers, Sound Projectors and Horn Loudspeakers.



#### **Commercial Systems**

These solutions provide different control methods and speaker types geared to the needs of different business environments. With audio quality tailored for a wide range of applications – including live music, background music, high-demand speech environments and zone announcement our systems deliver fully featured digital audio control with maximum flexibility and reliability.



#### Smarter video systems go beyond security

Video analytics is an important enabler of any strategy to substantially improve levels of security, as well as offering clear business advantages beyond security.

It acts as the 'brains' of a security system, using meta-data to add sense and structure to captured video footage. In effect, each network video camera becomes smart, enabling them to understand what they're seeing and alerting guards to any potential threats the moment an alarm rule is met, significantly increasing security levels. Because they can provide all kinds of statistics in the form of meta-data, cameras featuring built-in video analytics also enable a scene to be analyzed for reasons that go far beyond security. Making it possible to make smarter business decisions, reduce costs and increase efficiency.



#### Areas of expertise

Before we can rethink video security we need to ensure that excellence in video security and data management is given. This is why our intelligent portfolio is built around our areas of expertise: delivering highest quality of relevant images, most efficient bitrates with lowest storage requirements and network strain, and keeping video data secure.











#### **Integrated Security Solutions**

Our integrated security solutions address the challenges you face every day. Intelligent control panels with more power and more capacity.

- ▶ Advanced communications solutions for flexibility and reliability.
- ► Keypads that are easy to use.
- Innovative detectors with superior false alarm immunity and catch performance.
- ► Combination intrusion and fire, access control, IP video and home or business automation integration all with one panel.



#### **Motion detectors**

Bosch detectors can help speed installation by an average of 43 percent compared with models from other manufacturers. Our motion detectors deliver superior false alarm immunity and catch performance and offer features like a self-locking, two-piece enclosure, integrated bi-axial bubble level, removable terminal strips and a flexible mounting height to enable mounting within seconds.



# **Access Control Systems**

Maximize openness, availability and scalability

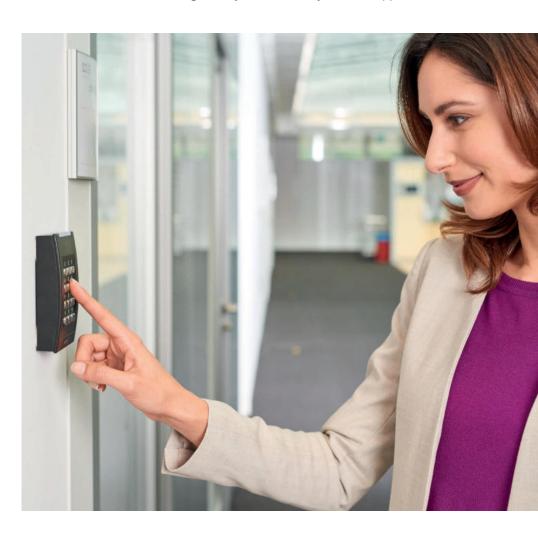
Access Control is a key pillar of today's security. The growing need to control access to buildings and areas, more flexible working time models and the limitations of mechanical locks make a modern and reliable access control system indispensable. Bosch offers complete, reliable and scalable access control solutions for any medium to large sized application. These flexible systems allow workers to get on with their jobs, while protecting staff from uninvited guests and businesses from property and information theft. We offer integrated systems for many different applications.



#### Scalable solutions - The system that grows with your needs

The access control components offer you a perfectly flexible system for medium to large sized projects. Thanks to the scalability of the hardware components – Access Modular Controllers, readers and credentials – the system grows according to your security needs. Start out with Access Professional Edition software for medium sized projects and switch later to BIS Access Engine when your security requirements grow – the hardware stays the same.

Flexible access control systems allow workers to get on with their jobs, while protecting staff from uninvited guests and businesses from property and information theft. We offer integrated systems for many different applications.





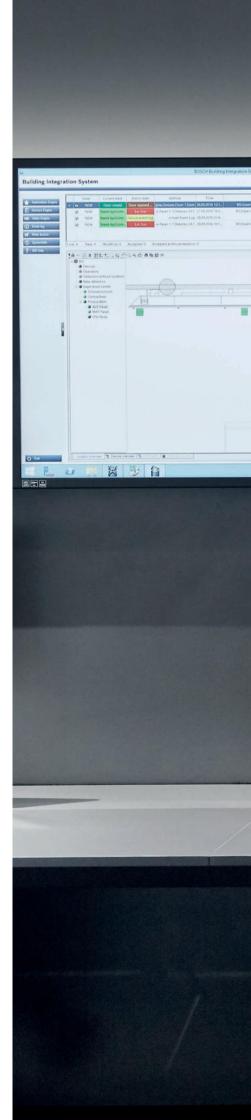
#### Your path to superior video management

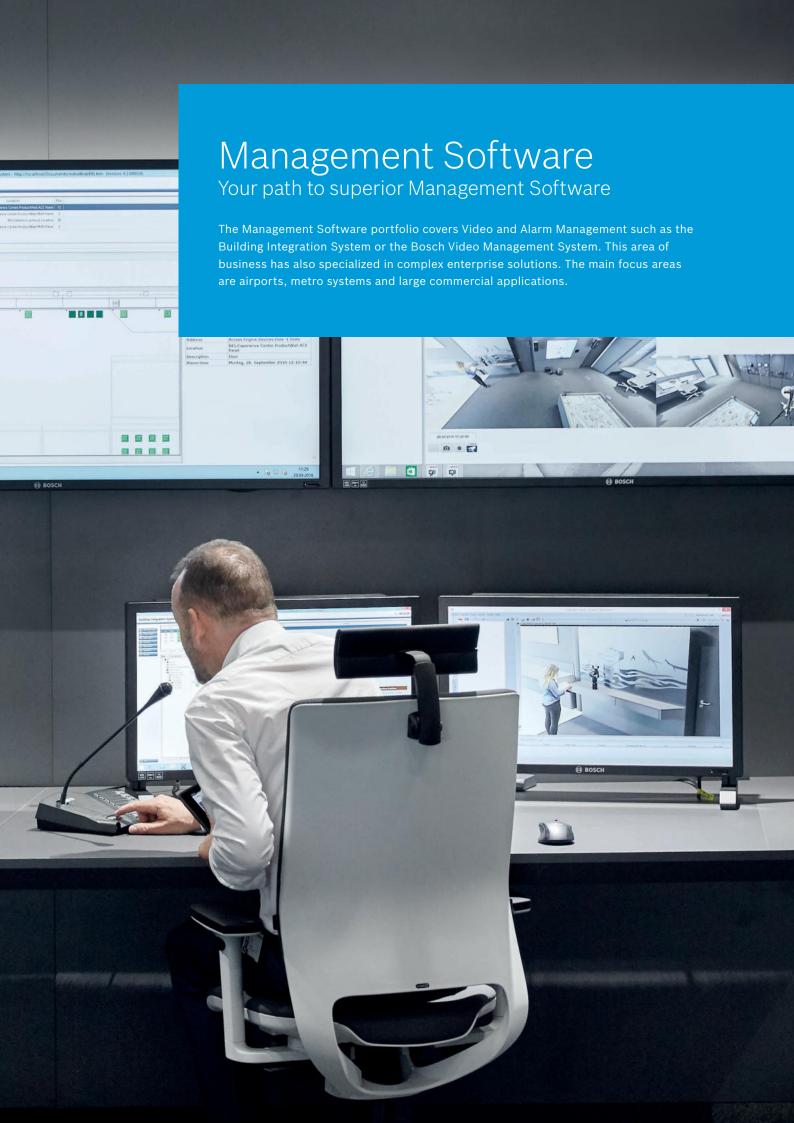
The Bosch Video Management System (BVMS) provides seamless management of digital video, audio and data across an IP network. BVMS allows you to deploy a Bosch video surveillance solution with unique features for any size of applications. BVMS is a scalable solution that grows with the user's needs. From BVMS Viewer to Professional or Enterprise, it can easily be upgraded while keeping the same look and feel so that no further operator training is required.



#### Your path to superior alarm management

The Bosch Building Integration System (BIS) is a software solution that manages different Bosch security subsystems like access control, video surveillance, fire alarm, public address or intrusion systems on one single platform. It is ideal for large applications. BIS is a robust and reliable security and life safety system for 24/7 deployment. 3000 installations integrating 10 million detectors worldwide prove the reliability of BIS. This all makes the Bosch's alarm management software flagship.







#### Award-winning systems to enhance meetings of all sizes

Each organization that uses a conference system has its own unique set of customer needs. Bosch is able to cover all necessary requirements with its complete conference portfolio: discussion, dual discussion, identification, dual identification, voting, dual voting, simultaneous interpreting and language selection, dual language selection, participant list, live video feed, third party apps, document viewing, internet access, presentation viewing and much more.





#### **New innovations**

The latest interpreter desk is optimized for the real-life needs of interpreters, complies with the latest as well as the future market requirements and provides the interpreter maximum freedom to focus on the job. Delegates can follow any multi-lingual conference via pocket receiver and headphones in their own language. Using the infrared language distribution system, meeting participants can move freely around the meeting area whilst still able to follow proceedings.



Avoiding damage to and preserving aesthetics of a historical building can influence which conference system is the best choice. Conference centers and multi-purpose rooms frequently host different events, each with different set-ups and configurations. Our wireless conference solution is perfect for both applications: it can be installed, re-arranged and operated efficiently and with virtually no impact on the integrity of the location.



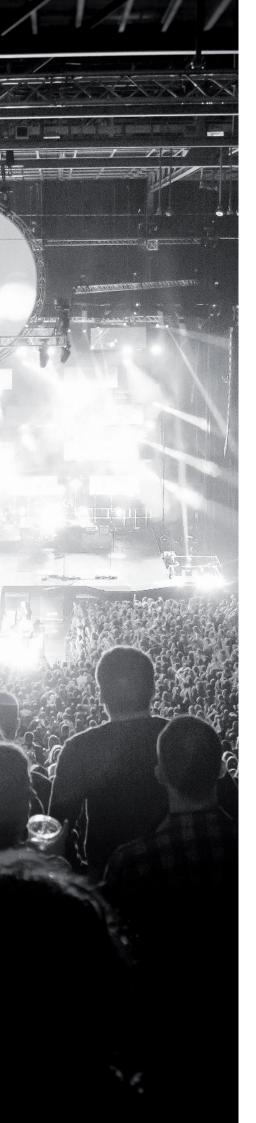














#### **Electro-Voice**

The Electro-Voice portfolio offers professional audio equipment such as world-class loudspeakers, microphones, digital signal processing and amplification for the broadcast, retail, commercial, installed, and concert sound markets. For 90 years, Electro-Voice has designed and engineered leading-edge sound reinforcement solutions — products that empower the performer, exceed the expectations of the audio professional and elevate the audience experience.



#### **Dynacord**

Dynacord designs and builds precision audio electronics that are trusted by discerning professionals for their uncompromising performance and reliability, technological innovation and high-end audio quality. With a product portfolio including mixing consoles, digital signal processing, power amplifiers and loudspeaker systems, Dynacord products are a premium choice for mobile audio applications, concert sound, large venues and fixed installations.







#### **RTS Intercom Systems**

RTS is an industry leader in the design and manufacture of intercom solutions. From the Advanced Digital Audio Matrix systems used to coordinate major network broadcasts of the world's largest events to small-format systems used for in-house productions, RTS is dedicated to innovating the future of global communications.





#### **Telex Aviation and Radio Dispatch Systems**

Since 1936, Telex designs and manufactures world-class aviation headset, intercom, radio dispatch, and wireless products that are trusted in mission-critical applications across the globe.

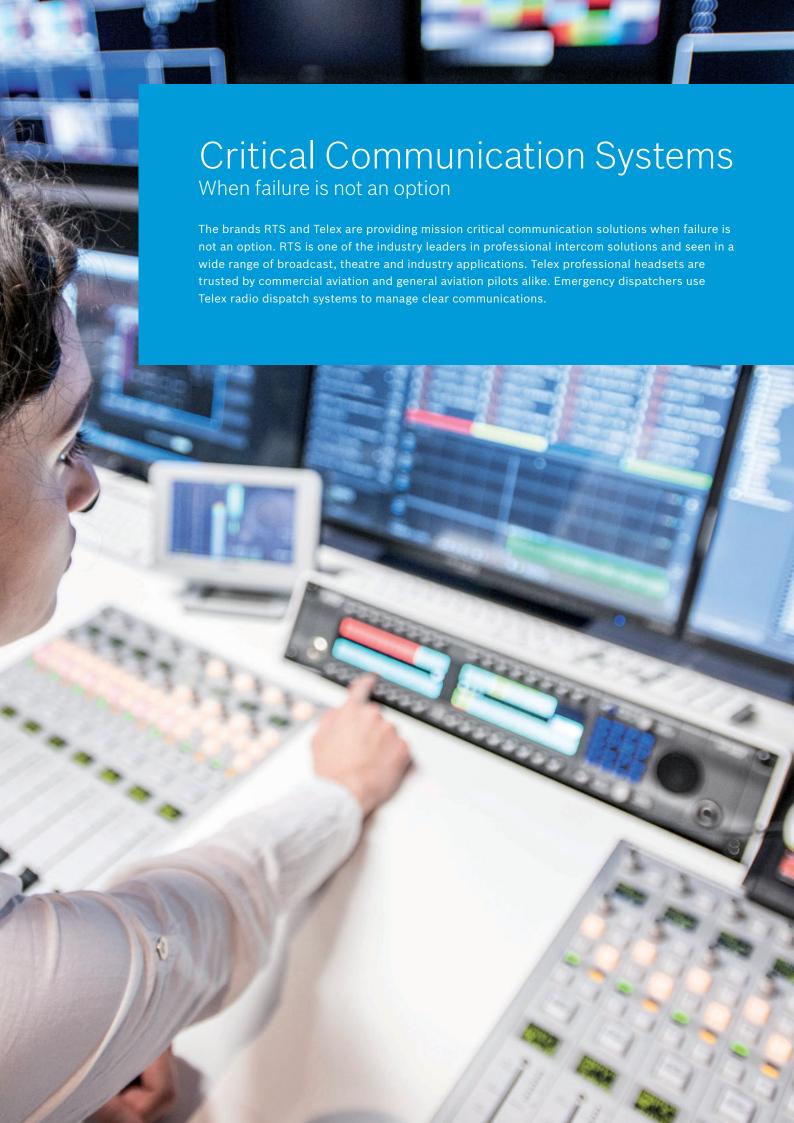
Telex has gained a leading position in the aviation market with headsets that have become industry standards, trusted by commercial and general aviation pilots alike.

Telex radio dispatch equipment is used in thousands of public and private applications. Our systems converting analog signals to IP are most commonly used for coordinating communications with emergency response and security personnel.











#### **Installer Services**

The Bosch Remote Portal makes remote connection to customer devices quick and easy. Installers can monitor supported devices and perform configuration tasks and maintenance remotely, supported by the cloud, saving time and money. The Remote Portal offers many more features and services that benefit installers or can be provided to customers as new offerings.



#### **Retail Services: In-Store Analytics**

We provide you with dedicated tools which help you gain actionable insights into how customers engage with your fixtures and product placements in store every day. Our In-Store Analytics service deliver reliable customer traffic data which support you to run your retail stores efficiently and enabling you to truly create customer value.

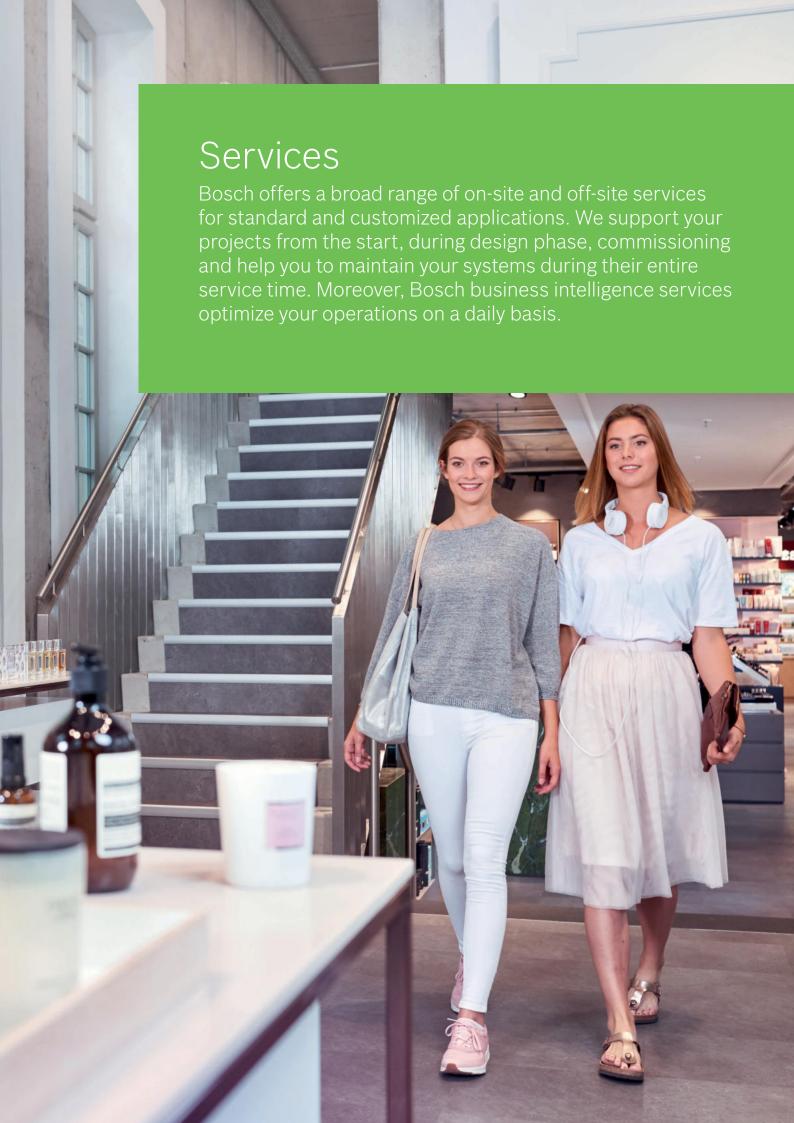
#### **Monitoring Services**

We bring state of the art video monitoring to your central monitoring station while greatly reducing the risks associated with new technology deployments. Our remote video surveillance services are enabled based on the Bosch IP portfolio. We offer ready to sell video services, seamless integration and efficient tools at every step.

#### Services for complex and large projects

Bosch's Engineered Solution Business helps in the planning, design and commissioning of safety, security and entertainment systems in highly complex applications. We focus on large scale and highly complex projects which request extended professional services from our partners. We work with and through system integrators to help end-users all over the world get the best security and safety solutions for their needs.





### What makes us different?



#### Multi-domain solutions competence

Bosch provides solutions for a safe, secure and enjoyable building and offers a broad spectrum of services for it: from video surveillance, access control, fire-, evacuation-, and speech-alarm systems, robbery and break-in notification systems via networked time and building integration management systems. Minimize risks, maximize security: no matter what your security task looks like, Bosch offers the best solution for every building or application. Besides, offering integration with other Bosch divisions' products we offer a complete solution for buildings across the world.

#### Integration capability

The integration management system manages different Bosch security subsystems on one single platform but it also provides a "tool box" to allow integration with third party.

With our open standards we help you create leading-edge security solutions, integrated end-to-end, leveraging our market-defining technologies in combination with the multitude of solutions available in the security market ecosystem. As founding member of ONVIF we believe in easy integration of different products, hardware and software, from different brands.

#### **Extended service portfolio**

We support your projects from the start, during design and customization, help during installation and commissioning to assure a smooth hand over into operations. Bosch Business Intelligence Services help our end users to optimize their business on a daily basis.

Benefit from our high-value repair service and high-quality spare parts to ensure you predictable, optimized operational costs. We provide first-class support that gives customers unsurpassed return of investment. We offer long service periods for repair and spare parts together with continued assistance to ensure you predictable, optimized operational costs.





