

The UK - Leading the World in High Quality Security Equipment

The United Kingdom is a world leader in the manufacture of security equipment and provision of security services. The market is characterised by high quality standards, reliability and value for money.

To understand why the UK security market is so highly developed one must consider three factors which have influenced its development. Firstly, the UK has longstanding experience in security. The market has enjoyed the support and encouragement of the British Government, which has helped to set standards for the industry and encourage commercial development. Working in close partnership, the UK Government has assisted the security industry in responding to market demands and public expectations of a secure environment.

Secondly, innovation and technological excellence are hallmarks of UK industry and the security sector is no exception. End-users from around the world turn to the UK security industry because of its extensive experience with everything from CCTV and airport security to access control, intruder alarms and much more.

Thirdly, the industry has taken a pro-active stance toward the adoption of standards for the manufacture and installation of products. The UK security industry has not only welcomed British and European standards but also played an active role in their development and implementation. Similarly the industry has embraced regulation, within a legislative framework, of the companies and personnel involved in the industry.

It is not surprising, therefore, that manufacturers of security equipment and service providers in the UK have extensive

experience of delivering first-class security solutions to a world-wide market. Innovation in the marketplace, export knowledge and high-quality products, supported by appropriate standards and legislation, ensure customer satisfaction at all levels.

A diverse industry in a changing world

The UK security industry encompasses many different disciplines. A feeling for how diverse it actually is can be gained by reflecting that the industry is concerned with the manufacture of goods, provision of services, research and development, system design and installation and the apprehension and detention of offenders. The security industry aims to provide complete security for people, homes, businesses and public installations. In fact, there are few areas of society which are not affected by the security industry in one way or another.

In the light of recent world events, personal and organisational security has become an even greater priority for public and private institutions, and is likely to remain so.

Sustained growth

Even prior to the current state of high alert, the UK security market was undergoing a period of sustained growth. Total industry turnover has grown from an estimated £2722 million in 1995, to over £4000 million per annum. This is largely due to the effectiveness of solutions developed by UK companies, ranging from CCTV and access control equipment to physical security and crowd management systems. As the market has grown, so has membership of the industry's leading trade associations. The British Security Industry Association, for instance, has enjoyed an almost four-fold increase in membership since 1995. Similarly, the Association of Police and

Public Security Suppliers has doubled its membership in the past eight years.

Meanwhile, the Joint Security Industry Council has emerged as the umbrella organisation for a raft of associations and organisations involved in the security industry.

A new organisation, UK-SIDEX, has recently been formed to help the UK security industry build its export sales.

Security equipment has played a major role in controlling public disorder and criminal activity in the UK, ranging from football hooliganism and street mugging to organised crime. CCTV linked to automated facial recognition systems has helped to identify known offenders attempting to enter football stadiums, and helped security staff prevent them causing disruption. Town centre CCTV is effectively identifying the perpetrators of public disorder and street crime. Meanwhile, equipment ranging from biometric identification products to sophisticated fraud detection systems is being developed and deployed in the UK to combat organised crime.



In the field of airport security, the UK is regarded as a world leader. Over the years it has tested, implemented and improved measures to ensure 100% screening of baggage prior to loading onto aircraft. Expertise in this area has developed to such an extent that authorities from around the world turn to the UK security industry for advice on implementing measures to improve aviation security. More details on UK expertise in high integrity security environments can be found on page 20.

Growth in market demand and the proven success of security solutions developed in the UK have both helped to boost investment in research and development. As a result, the industry has enjoyed the benefits of improved manufacturing techniques, introduction of new and improved technology and a co-ordinated approach to the promotion of security equipment, in the UK and abroad.

Products and services which address public, commercial and personal security have now been developed to meet virtually every conceivable need, from protective clothing to fully integrated CCTV, alarm and perimeter protection systems for large premises.

Supported by innovative academic research and commercial investment, the security industry in the UK will continue in its role as a leading developer and supplier of an extensive portfolio of security solutions, designed to meet the exacting requirements of markets at home and abroad.

Identification and Verification: The Growth of CCTV, Access Control and Integrated Systems

■ CCTV: Enhancing Public Safety

The United Kingdom has extensive experience in the development and deployment of CCTV systems. The UK market alone is worth £350 million, including the cost of design, installation and maintenance, and is now considered to be mature.

In the past decade, CCTV has become a familiar sight in the UK. Following the wide publicity given to pilot schemes during the 1980s in towns such as Bournemouth, CCTV's contribution to enhanced public safety has been well documented. It is estimated that there are more than one million cameras installed in the UK today, giving it one of the highest concentrations of CCTV in the world.



Numerous studies have been carried out following the installation of CCTV cameras in towns and cities throughout the UK. They demonstrate that these cameras have a major impact on the detection and prevention of crime. For instance, in London's Oxford Street pick-pocketing fell by 30% in the three months after a new CCTV system was installed. Meanwhile, in Oxford city centre, CCTV contributed to the arrest of 659 offenders in a period of three years. A survey of town centre stakeholders, conducted in 2001 by Professor Peter Jones of the Cheltenham and Gloucester College of Higher Education, found that CCTV was regarded as the most effective element of crime prevention.

With such extensive experience in the installation of CCTV, it is not surprising that UK companies have become highly proficient in

the specification and installation of these systems. British firms employ a wide variety of technological solutions to address a range of installation issues, and the time it takes to install a new system has been dramatically cut. The technology behind CCTV is reliable and flexible. From the lenses and the CCD chips that create the image to the methods used to transmit and store image data, CCTV

technology has developed rapidly. Digital technology in the camera has led to better low-light capabilities. Digitisation of the image at the camera facilitates transmission of the images over a wide range of media, including fibre optic cable, microwave links, IT networks (including the Internet), and even radio. Use of existing IT networks, for instance, can help to achieve

significant savings in installation costs. Meanwhile, digital storage devices such as hard-disk recorders and DAT tape are proving a useful and cost-effective adjunct to traditional videotape archiving.

■ Scanning technology

X-ray scanners and metal detectors provide the capability of detecting weapons and explosives. There is a huge range of products available, from lightweight hand-held scanners to comprehensive systems for corporate mailrooms and airports.

Businesses world-wide increasingly regard bomb and weapon detection as an important part of the security portfolio, and even schools and leisure facilities are beginning to see the need for increased vigilance. Advances in technology mean that screening small and large packages can be done with little disruption to the normal workflow. Similarly, screening personnel with metal detectors can also be done in a reliable and speedy fashion.

CCTV CASE STUDY Newham District Council

Advances in CCTV and its integration with other techniques are well demonstrated by the installation for Newham District Council, where CCTV is enhanced by facial recognition technology.

A Vision Facelt system supplied by Dectel (www.dectel.co.uk) and linked with Petard Vision's (www.petards.com) touch screen technology automatically identifies known offenders stored in the Facelt database.

The system installed by Dectel can scan and match a face from a database of millions of faces in less than a minute, and the system has scanned 520,000 faces since August 2000. When an alarm sounds, the touch screen technology takes an operator to the camera that has identified someone and the operator takes control. On average, three alarms a day are sent reporting a near match, but it is the operators that decide whether to act on that match. The human component of the system ensures that civil liberties are respected whilst effective surveillance is carried out.

Facial recognition technology has enhanced dramatically the effectiveness of Newham's system. It is also used to monitor young offenders under the UK Government's curfew scheme and to identify known hooligans trying to gain access to a London Football Club on match days. In this instance, the system was programmed with the images of 32 known offenders. Out of 4000 faces emerging from the London Underground station, it picked out 12 suspects, ensuring that they did not get into the football ground.

According to police figures, security cameras in Newham have reduced crime by a third, and, in some areas, cameras have contributed to an eighty percent reduction in street crime.



■ Access control systems

Access control systems and techniques have been developed for a wide variety of applications, ranging from a simple replacement for the lock and key to much more complicated systems. UK companies have considerable experience in designing and installing complex access control systems. These typically use a zone-control system, whereby the system manager defines areas of a building or site which will be accessible to different groups of end-users, depending on the access privileges which have been granted to them. Access privileges can even be granted for certain times of day, so, for instance, cleaners can be given access to particular offices at specified times. For



companies with multiple sites, systems can be integrated between buildings, enabling system managers to grant special access privileges to employees who travel between sites on a frequent basis.

Access control can use two levels of authorisation: identification and verification. For low risk applications, it may be sufficient to identify a person using a PIN code or some type of identity device, such as a swipe card or proximity token. In high risk applications, an additional layer of security is added with the requirement for some type of confirmation or verification of identity. In this case, once a person has identified himself, he might be asked to verify his identity by entering a PIN code.

A relatively recent development in access control is the use of biometrics, such as fingerprints, facial geometry or iris patterns, to identify or verify the identity of a person. Using biometrics, it is even possible to combine these two steps, eliminating the need for identity cards and PIN codes, while maintaining the highest levels of security.

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With the wide variety of technologies available, one of the challenges for organisations is to match access control equipment to the application for which it is intended. To achieve the most cost-effective solution for the intended application, one must balance risk against cost, thus ensuring the ensuing design is neither overzealous in its application of security nor leaves loopholes which would be open to exploitation.

UK experience in these areas once again comes to the forefront in the form of an Access Control Specification Guide (see Contacts and Further Reading). The Guide has been produced by the British Security Industry Association, in collaboration with the Association of British Insurers, to help

specifiers understand European standards. Drawing on the expertise of UK security companies, the Guide helps purchasers define their needs, specify their systems and then grade the security of the resulting installation. The Guide covers the following types of access control equipment: access control doors, electromagnetic locks, machine-readable technologies for tokens and reader technology. It provides examples of installations, recommending various types of equipment depending on the grade of security that is required. It also provides a single-page summary sheet for specifiers to work from.

Case Study – Access Control

In Walsall, West Midlands, a new £21 million art gallery required the installation of a new access control system. The core requirement was to secure millions of pounds worth of art collected from all over the world. Specifically, the challenge was to ensure the access control system blended discreetly into the design of the building while enabling the system manager to control the access rights of large numbers of permanent staff and temporary contractors, both prior to and after the public opening of the building.

PAC International was chosen to provide a system which addressed these needs. The building is large with a number of distinct security zones, including both public and private areas. Overall, it incorporates 22 exhibition areas including six galleries, a children's discovery gallery, activity and education rooms, a conference suite, library, café and storage facilities.

The PAC system is part of an overall security installation which includes an 80-camera

CCTV system, treble-locked doors, over 1000 alarm detection points and reinforced and alarmed windows. The PAC system itself covers 48 doors and can be controlled from the central control room which is manned by three security staff. In addition, the external PAC proximity token readers on the outside of the building are vandal-resistant.

After the building opened, the proximity tokens used by contractors to access parts of the building were no longer required. It was a simple matter, using the administrative facilities of the PAC system, to disable these tokens instantly, removing them from use until they could be collected from the contractors.

The whole system is managed by PAC's dedicated access control software which easily facilitates the addition of door controllers, readers and tokens. It can be upgraded to provide photo ID and pager interface options, if required.



Physical Security – The Bedrock of Secure Applications

Although much attention is paid to electronic systems, reliable and cost-effective physical security is the bedrock of any security application. The UK has a long tradition of manufacturing high-quality physical security products. Manufacturers have been quick to embrace standards, and there is a broad range of products readily available on the market which have been subjected to rigorous testing.

There are a number of test houses in the UK which perform demanding "attack tests" against physical security products, rating the products according to the types of attacks which were successfully resisted, and for how long. The Loss Prevention Certification Board (LPCB), part of the BRE, and Sold Secure are two test houses which conduct these types of tests. They also maintain lists of products which have been tested.

(Details of these organisations may be found in the "Contacts" section of this guide.)



Physical security equipment available from UK companies includes doors, locking devices, perimeter protection, blast resistant containers and windows, grilles and screens, shutters, computer equipment cages, secure cabinets and safes. Many of these can now be integrated with electronic devices, such as alarms, electronic access control and biometric readers to create ever more intelligent systems.

The application of physical security can even address some of the most extreme threats to security. One UK company, AL Digital (www.aldigital.co.uk), has created a secure storage bunker for housing IT servers, demonstrating the expertise which is available for export around the world. The bunker, a former military site, provides 60,000 square feet of space which is secure against intrusion and also against many of the modern threats

to IT security, including terrorism, electromagnetic pulses, electronic eavesdropping, HERF and Solar flares. Physical security is



provided by doors which take two people to open and highly sophisticated access control and monitoring systems.

In addition to traditional forms of physical security aimed at protecting buildings and assets, there is a growing market for products which protect the individual against threats

ranging from chemical and

biological agents to physical attack. The UK is at the forefront in the development of lightweight materials which can be deployed quickly in the form of clothing or shelter to help protect those in hostile or dangerous circumstances.

■ Alarm systems

After physical security, alarm systems are the most popular form of security and provide a vital second layer of defence in many installations. Typically the market can be viewed as two separate sectors: domestic and commercial/public sector.

Insurance requirements have helped to ensure that the vast majority of commercial and public sector buildings in the UK have some form of alarm system installed. Intrusion into commercial premises is a significant problem, and a successful burglary can result in severe disruption to business. Some studies have indicated that in extreme cases it can even lead to the failure of the business, following the loss of vital databases or equipment.

The UK intruder alarms market is well developed, with a wide range of equipment and systems available depending on the customer's budget and security requirements. The UK has developed considerable expertise

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in the design of sensors and detectors, alarm control panels, alarm transmission equipment and remote monitoring equipment and protocols. One area which is undergoing rapid development is wire-free alarm systems, which eliminate the need for unsightly wiring for sensors, detectors and control panels. An additional area of development in recent years in the UK is private alarm response, a service which ensures that customers meet police requirements for the attendance of a keyholder to a premises following an alarm activation.

The UK is well advanced in the development of quality standards for alarm equipment and systems. The industry has taken an active role in the development of British and European standards through various trade associations and inspectorates. The UK has two bodies devoted to the maintenance of quality standards in the installation of alarm systems: the SSAIB and NACOSS.

One of the challenges associated with alarm systems is controlling false alarms. Whether caused by malfunctioning equipment or user error, the accidental activation of alarm systems has been problematic for both the end-user and the police. Today's modern alarm systems integrate confirmation technology which has significantly reduced the incidence of false alarms.

The industry continues to work closely with customers and police authorities to further improve their false alarm rates.

Confirmation technology can take one of three forms:



- Audio: Alarm systems incorporate microphones which enable an alarm monitoring centre to listen for telltale signs of intruders present in a building.
- Sequential: A cost-effective solution in which the alarm control panel only sends an alarm signal if two or more detectors within a zone are activated within a set time period. In advanced systems, the alarm monitoring centre can examine the sequence in which sensors have been activated and effectively track an intruder through the premises.
- Visual: The alarm system is integrated with a CCTV system which enables the alarm monitoring centre to look into a premises to verify the presence of intruders.

These new standards, both at the national and European level, have had the effect of spurring the UK alarm market to develop a new range of equipment, ensuring that it continues to set the pace for the global security alarms market.

Meanwhile, in the domestic alarms market, considerable advances have been made in reducing the costs of installation, while ensuring the effectiveness and reliability of the systems.

Many new homes come pre-wired for alarm systems, which helps to eliminate unsightly wires trailing up walls and around skirting boards. For older homes, wire-free alarms are proving increasingly popular. The cost of alarm monitoring services for domestic premises is also decreasing, which is helping to reduce the number of homes which rely on a bell box and the swift action of neighbours to alert the police.

The UK alarms market, which includes domestic, commercial and public sector premises, as well as automobile alarms, has shown steady growth over the past decade. In 2000, the market was worth an estimated £620 million.

To be effective, alarm systems must be installed in a manner which suits the building



and the local environment. Design aims to achieve three things:

- Effective perimeter protection in conjunction with physical security measures;
- Internal traps which help to restrict the intruder's freedom of movement; and
- Target protection which provides an additional layer of protection for particularly valuable assets.

The UK has some of the world's leading experts in the design and installation of security alarm systems. Consultancy services can help to ensure that any alarm system will continue to meet the needs of the customer for years to come.

■ Integrated Solutions and Consulting

In the light of recent world events, many organisations are undertaking comprehensive reviews of their security, viewing it as an integrated whole rather than addressing security in a piecemeal fashion.

Technological innovation and adoption of new standards has created the opportunity for organisations to embrace an integrated approach. In a nutshell, this means the various components of a security system, such as access control, intruder alarms and CCTV, will work together, maximising the security benefits delivered.

An ever-widening portfolio of products and a growing awareness of the myriad of hazards that threaten organisational security has helped to create a demand for professional security consultancy services. Consultants can be a cost-effective way for an organisation to exploit the expertise of a professional security practitioner who understands the range of possible threats and the means available to counter them.

The UK's world-renowned consultants offer services ranging from threat assessment, security audits, solution design and training, to VIP protection and disaster recovery. The use of these services can help to ensure that all stages of a project are implemented correctly and cost effectively.

The Association of Security Consultants (www.securityconsultants.org.uk) is the professional organisation for independent security consultants. The organisation provides a directory of its membership, and within the database can be found leading experts in virtually every field of security, covering all sectors of commerce and industry.



Trade Bodies and Other UK Industry Organisations Create a Climate of Excellence

■ Key Players

There are two key trade associations for the security supply industry: the Association of Police and Public Security Suppliers (APPSS) and the British Security Industry Association (BSIA). In addition to these trade associations, there are a number of other organisations that support the security industry and are a valuable source of information for anyone interested in learning more about the UK market. These include the Joint Security Industry Council (JSIC), UK-SIDEX, the Association of Building Hardware Manufacturers, the Master Locksmiths Association, the Association of Security Consultants (see above), Security Systems Alarm Installation Board, National Security Inspectorate, Loss Prevention Certification Board, Sold Secure and SITO, among others. A comprehensive list of organisations is available from the JSIC website. (www.jsic.co.uk)

■ The Association of Police and Public Security Suppliers www.appss.org.uk

The Association of Police and Public Security Suppliers (APPSS) is a division of the Defence Manufacturers Association (DMA). Established in 1993, it provides a reference point for companies supplying public (government) security agencies world-wide. These companies are involved in the provision of products and services to police, prison, fire and customs services, airport and harbour authorities and others concerned with public security in the UK and overseas.



Companies belonging to APPSS provide references including trading accounts for two years and citations from at least two customers.

In addition to comprehensive liaison services with manufacturers and government departments, APPSS also manages the annual Home Office equipment exhibition which is staged on behalf of the Police Scientific Development Branch. It also organises corporate stands at events such as the Association of Chief Police Officers exhibition in the UK and the Milipol exhibition in France.

The association organises high profile, niche exhibition events in British Embassies abroad, and, by maintaining close contact with the relevant Home Office inspectorates and departments and British Trade International, aims to promote the export capabilities of its members to public security agencies overseas.

To further facilitate exports, APPSS has a Security Export Focus Group whose members have a specific interest in exporting their goods and services and whose details are published in the directory section of this guide.



APPSS publishes a quarterly house journal, Public Security, which is available to public security officials. In conjunction with British Security companies and with support from the Department of Trade and Industry and the Foreign and Commonwealth Office, APPSS produces and distributes an annual directory of security manufacturers and service supplying companies including high level consultancies. This directory is available to chief police officers, purchasing and contract managers and their operational officers who use or specify security equipment. It is also sent to selected British Embassies and consulates world-wide and to a range of overseas contacts in public security agencies

■ The British Security Industry Association
www.bsia.co.uk

The British Security Industry Association (BSIA) is the trade association for the private security industry. It has over 500 members which are split into twelve autonomous sections, covering all aspects of the security market. Its membership includes manufacturers and installers of security products as well as suppliers of security products to the domestic and overseas markets. The primary aim of the BSIA is to help member companies succeed in a changing and highly competitive business environment, a vital element of which is ensuring that members provide the highest possible standard of products to their customers.



Key areas of BSIA activities include:

- Information dissemination: Information is disseminated to members, potential members, users of security products and services and the general public in order to raise awareness and understanding of all security related issues.

- Legislation: The BSIA is extremely active in liaising with Government to ensure that legislation reflects both industry and customer needs.



- Standards: One of the BSIA's top priorities is the maintenance of high standards within the industry. It places rigorous requirements on companies wishing to become members. It also draws up and maintains industry codes of practice and technical documentation and submits relevant documents for consideration as British Standards.

- Training: The BSIA created the Security Industry Training Organisation (SITO) in 1991 which has gone on to become a highly successful independent organisation (discussed in more detail elsewhere in this guide). The BSIA continues to work on training initiatives by, for example, helping to establish co-operative training schemes for apprentice alarm installers.

- Lobbying: The BSIA is able to lobby key organisations, from the Home Office to the Association of British Insurers, to achieve desirable change and valuable working partnerships.

- Publications: The BSIA produces an annual directory, Security Direct, which includes detailed listings of members as well as overviews of key issues affecting security purchasers and providers.

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■ UK-SIDEX

www.uksidex.org.uk

UK-SIDEX is the Export Champion of the UK Security Industry. It is the industry's voice on export matters, targeted at promoting British security excellence overseas and providing a focal point between the industry and government services.

UK-SIDEX aims to assist British companies to build export sales. It helps by:

- Seeking new export opportunities for British security companies
- Developing a new national strategy for security
- Providing a focal point between industry, government and the marketplace
- Encouraging security companies to make full use of government support services and resources for exporters



Its services include: export healthchecks; identifying export opportunities; individual support and advice to exporters; arranging market investigations; seeking appropriate partners and collaborators; signposting government and private sector services; qualifying leads; calibrating in-country support networks; overseas support and exhibition representation; sourcing UK security products and services; export licensing support.

UK-SIDEX is a government-backed initiative, fully supported and sponsored by Trade Partners UK and the DTI. It collaborates closely with FCO, DESO and with other related official organisations and NGOs.

UK-SIDEX is in partnership with the trade associations APPSS and BSIA, with the industry body JSIC and with the participation of ACPO (Association of Chief Police Officers).

■ Joint Security Industry Council

www.jsic.co.uk

The Joint Security Industry Council (JSIC) is the umbrella organisation for a broad group of security associations, inspectorates and organisations. JSIC helps co-ordinate representations from the industry in discussions with Government and the police on security industry matters, and in turn helps in the process of distributing information from these discussions and other sources back to the industry.

JSIC was formed from the Security Industry Lead Bodies that covered the Security Systems and the Manned Security sectors. When they were wound up in 1995, the consensus of the members was that the forum established by the Lead Bodies should continue to meet to formulate policy and the necessary actions for the continued improvement of the Security Industry. In addition, the organisation has been instrumental in the development of workplace assessment leading to recognised qualifications and also in the development and monitoring of standards.

JSIC is not a trade association, but is a major confederation of Associations and other groups such as training organisations and regulatory bodies, government departments and industry users. The organisation seeks to enhance the profile, image and importance of the Security Industry, influence the commercial environment, solicit the views and concerns of clients and customers and help improve the security industry's performance and efficiency. It allows the industry to operate, where appropriate, a single line of communication with Government departments, European agencies, UK Parliament and broadcast and print media.

Collectively, the Council speaks directly on behalf of over 2000 security providers and has ready access to the views of another 1800 contractors.

Apart from co-ordinating debate and response on major issues, JSIC seeks to raise standards of professionalism within the industry and acts as a centre for research, gathering and distilling data on a range of technical issues.

■ **Association of Building Hardware Manufacturers** www.abhm.org.uk

The Association of Building Hardware Manufacturers comprises Britain's leading manufacturers of builders' hardware, architectural ironmongery and door and window fittings.

Over the past 100 years, the Association and its members have been responsible for creating products which meet the security and other needs of customers, supporting research programmes and developing performance standards in conjunction with national and international organisations, such as British Standards Institute and CEN.

■ **Master Locksmiths Association (MLA)** www.locksmiths.co.uk

The Master Locksmiths Association establishes and promotes standards of conduct, practice and materials within locksmithing and disseminates information amongst its members to further knowledge and education.

The MLA is recognised by:

- The Police - (the Metropolitan Police amongst others will only instruct locksmiths who are MLA Trade Division members)
- Home Office - The MLA has been instrumental in campaigning for national

- standards in the locksmith industry
- British Standards Institution - the MLA Technical Committee tests locks to BS3621 clauses 4 and I0 on their behalf
- Sold Secure - the National attack test scheme supported by the Home Office
- Association of British Insurers
- Building Research Establishment
- Many other trade and professional bodies

With members around the world, including the United States, Japan, Australia and the rest of Europe, the MLA is a ready source of information for customers world-wide.

■ **Security Systems Alarm Installation Board (SSAIB)** www.ssaib.co.uk

The SSAIB was formed as a result of the concerted efforts of a section of the alarm installing industry to raise standards and provide an accreditation system. It achieves this objective by maintaining a roll of Approved Installers throughout the country who have been inspected, comply with the relevant standards and have the necessary skills to install alarm systems professionally.

All Approved Installers on the roll are expected to carry out their work to the highest possible standard using only quality components. SSAIB-inspected companies are assessed in three main areas:

- Company - Company inspections are intended to ascertain if Registered Firms are complying with the Rules and Criteria for Recognition
- System - System inspections are technically focused, i.e. concentrate on the installed system's compliance with the relevant British Standards and the general standard of installation
- Maintenance - Maintenance inspections check systems are being maintained at the frequencies specified in relevant

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standards and/or as agreed with customers.



■ National Security Inspectorate (NSI)

www.nsi.org.uk

The National Security Inspectorate (NSI) is the umbrella organisation for the security systems inspectorate, NACOSS, and the manned guarding inspectorate, ISI. Since 1990, NACOSS has been the national approval service for companies in the electronic security sector. NACOSS approves firms that install, operate and maintain:

- Intruder Alarms
- Access Control
- CCTV Systems
- Alarm Receiving Centres

The standards applied by NACOSS are developed on a "round table" basis to ensure that they are acceptable to both end-users and the Recognised Firms, which are required to comply with four groups of standards:

- Technical Standards (British Standards or the European equivalent)
- Business Standards (Covering insurance, premises, finances etc)
- Codes Of Practice (Covering industry-specific issues such as the reduction of false alarms and customer care)
- Quality Management (Based on ISO 9000 standards)

■ The Loss Prevention Certification Board (LPCB)

www.brecertification.co.uk

The LPCB is part of BRE Certification Ltd, which provides certification to confirm that products, services, systems and personnel in the built environment meet certain standards and specifications.

The LPCB certification and approvals body is a leading body for the fire and security sectors, and approvals are recognised by governments and regulatory authorities in Europe, Asia-Pacific and the Middle East.

The details of all LPCB-approved products and services are published in its List of Approved Security Products and Services which can be used by specifiers to determine suitable solutions. A companion volume, **The LPCB Register of Companies Assessed to ISO 9000**, is also provided by the organisation.

■ Sold Secure

www.soldsecure.com

Sold Secure is a non-profit-making company dedicated to reducing the risk of crime by the assessment of security products. Sold Secure was established in 1992 by Northumbria and Essex Police with the help and backing of the Home Office. It is now administered by the Master Locksmiths Association and works from purpose-built laboratories in Daventry. The scheme has close ties with a number of constabularies and insurers who provide regular information regarding the methods of theft and the tools utilised by criminals in their area. This helps to maintain up-to-date specifications and means security products can be assessed in the light of the risk they are likely to encounter when in use. Now products are tested by a highly motivated team of professional locksmiths under the direction of the Chief Executive, Dr Martin White. A small board of directors meets on a regular basis to administer the scheme and move the process forward in keeping with modern theft methods.

Manufacturers and suppliers can apply to have their products approved by Sold Secure. Products which have been satisfactorily assessed may bear the Sold Secure Quality Mark. Types of security tested include:

- Cars
- Motor Cycles
- Bicycles
- Caravans
- Ground Anchors and Security Posts
- Commercial Vehicles

The Sold Secure product range increases in accordance with demand. New products are added monthly. They include Padlocks, Shed and Garage security and, in the near future, small safes.

■ Standards and Legislation

Regulation of the security industry is a focus of activity for Government and Trade Associations, ensuring that domestic security solutions are appropriately provided and operated. The standards set for the UK market are sufficiently rigorous to automatically meet the requirements in many other markets.

The UK's long experience of this industry means suppliers and consultants have a detailed insight into the value of regulation and the likely pitfalls of operating outside a legislative framework. UK companies are familiar with the demands of working within markets with strong legislation and that require strict adherence to standards.

The Private Security Industry Act 2001 has been introduced to regulate an industry where the highest standards of workmanship and personnel professionalism are required. The Act has established a Regulatory authority to licence security personnel.

The Act is paving the way for an improvement in the image and working conditions of an industry that employs over 300,000 individuals. Regulation should also enable private security officers to play a more central role in crime

prevention in the UK, a development supported by both Government and the Police. Further information can be found on the Home Office website at www.homeoffice.gov.uk and on the Security Industry Authority's website at www.the-sia.org.uk/

Trade associations and inspectorates in the UK are heavily involved in the production of British and European standards for security. Many organisations have regular representation on British Standards Institution (BSI) (www.bsi-global.com) committees, enabling standards to be drawn up that benefit from the input of all the relevant experts in the industry.

For the emerging technologies, where there are no published European or British standards, the BSIA in particular is heavily involved in drawing up BSIA industry standards, which are then submitted to BSI for consideration as national standards.

APPSS is also involved in the development of new standards, providing input into the BSI qualifications for protective body wear, for example. Government organisations, such as the Police Scientific Development Branch, have their own standards for products with which APPSS members are expected to comply.

■ Training

The UK has a well developed training programme for the security sector which ensures that the design, installation and



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maintenance of security systems is properly managed and carried out by knowledgeable individuals.

The Security Industry Training Organisation (SITO) (www.sito.co.uk) is a world leader in developing accredited qualifications and training programmes for the security industry. The resulting course materials are available for purchase by organisations both in the UK and abroad. SITO provides courses and training to lead to nationally-recognised qualifications and also provides guides to the requirements and processes which enable organisations to develop in house training resources.

For training on particular products, many UK companies provide excellent training resources, ranging from in-house or on-site tutoring to training manuals available in hard-copy format or in downloadable format from the Internet.

■ Academic Research

UK Universities and other research establishments have been actively involved for many years in the development of new technologies for the security equipment industry.

The Engineering and Physical Sciences Research Council (EPSRC) (www.epsrc.ac.uk) funds research at several major universities in the UK in a number of security related projects. In addition, the Department of Trade and Industry's Management of Information LINK programme, (www.dti-mi.org.uk) has established sixteen collaborative projects between industry and academia, to develop new technologies and systems for controlling fraud and improving security and privacy.

This initiative arose from the government's Foresight programme (www.foresight.gov.uk), which brings together business, government, the science base and others to identify future threats and opportunities. It operates through a number of panels addressing particular sectors and themes. Two of the sector panels, Retail and Distribution and Financial Services,

both identified fraud prevention, privacy and security as key concerns.

CCTV has already proven its value in many cities and towns throughout Britain, improving the quality of life for citizens by reducing crime and increasing detection rates. Academic research continues to enhance the possibilities of video and scanning technologies by integrating them with innovative software which makes systems more intelligent and adds significant functionality.

For example, as drive-in retailing becomes more popular, Manchester University is tackling the problem of providing secure and convenient access to retail services through a project named SCID, Secure Customer Identification for Drive-In Retailing. This project combines face recognition technology with number plate and vehicle recognition technology to provide reliable customer identification.

More information about academic research projects can be found elsewhere in this guide.

Responding to the need for High-Integrity Security Environments

UK offers unrivalled expertise in airport and port security

In today's climate of heightened concerns for safety, the movement of large numbers of people through public spaces such as airports, ports and leisure facilities has led to increased demands for high-integrity security systems. The UK security equipment industry offers a wealth of experience and expertise that will be a valuable asset to those seeking high quality support for the design and installation of public infrastructure security systems.

For more than 30 years, the UK has been a world leader in providing effective security solutions in response to a variety of domestic and international threats. Supported by a framework of legislation, robust trade associations and new technology-led innovation, the UK security industry has consistently demonstrated its capability to deliver secure and cost-effective systems and equipment into environments that demand the highest standards of safety.

Leading the World in Consultancy and Design

Britain's ports and airports are amongst the busiest in the world. Its port industry handles more than 300,000 shipping movements a year and 36 million international passenger journeys. British Airports Authority, which owns seven UK airports, including Heathrow, takes responsibility for nearly 200 million passengers each year. The challenge of securing these sites and of ensuring passenger and employee safety is ongoing and of the highest priority to government and operators,

who consistently rely on the UK security equipment industry and its proven track record of reliability.

The UK's National Aviation Security Programme (NASP), administered by the Department of Transport and local regions, is seen by many as the foundation of best practice. The High Integrity Security Procedures outlined under NASP affect the development of physical assets such as access roads, parking, terminal buildings, perimeter security and access and egress for all. NASP has enabled airports in the UK, for instance, to develop and implement operating systems, in consultation with the security industry, that meet and in many cases exceed requirements.

The UK security equipment industry offers world-class specialist consultants, suppliers and designers of technology equipment and systems, with the knowledge and practical experience of developing high-integrity security environments. A number of these firms have considerable experience of working at US and other international sites and are able to offer expert advice and knowledge in support of local requirements.

When combined with operable policies and new technology, the UK is in a unique position to deliver advanced solutions to the ongoing problems of security and threats to civil aviation and shipping.



Some of the critical issues that UK companies can assist with, include:

- Vulnerability surveys
- Identification of solutions required to strengthen systems to NASP standards
- Specialist design, planning, implementation and staff training

In the aviation industry, for example, the scope of this work is likely to include:

- Delineation of Landside and Airside and operative effect
- Passenger facilitation handling and screening
- Baggage handling & 100% Hold Baggage Screening and Bag match
- Personnel Controlled Access
- ICT Systems Security
- Airside / Ramp access management and airside vehicle security
- Air cargo supply, security control and accounting systems
- In flight Catering supply screening and control
- Fuelling and Secure Logistics systems
- Retail landside and airside
- Aircraft Servicing and Maintenance controlled access facilities
- Hangar controlled
- Perimeter and core security, command and control systems
- Automobile parking and rental facilities
- Transport interchange systems and links
- Security staff training
- Security standards, protocols and procedures

In general the products and service available fall into the following categories:

Threat and risk assessment and risk reduction

In the UK there are a number of expert companies that can offer assistance to management teams in identifying the gaps that need to be covered. This includes IT Security, security risk analysis and crisis response. Many of these companies have highly skilled and experienced security experts who have experience of both military and civilian security issues as well as knowledge of FAA regulation in these areas.

Technology application and implementation

One of the significant advances has been in the use of baggage screening technologies. Whilst the technologies have the ability to offer high integrity solutions by careful application, this can be extended to cover 100% of all hold baggage without a detrimental impact of service standards for baggage handling at airports. BAA, for instance, has invested over £175 million for the installation of systems to screen hold baggage for all international departing passengers at its UK airports. These systems use the world's most advanced and effective screening technology.

There are a wide range of UK companies that have been involved with the implementation of these hold baggage screening systems. In particular, the problems of retro fitting these technologies into existing facilities where there is confined space and zero reduction on passenger service standards is essential at the airport.

Biometrics has been a topic of interest for many years. However this is already being used successfully for tracking and verifying passenger

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Case Studies - Leisure Industry

1 Spanish resort complex depends on UK security equipment

Heron International's latest major leisure development - Heron City Paterna in Valencia, Spain is proving that a safe and relaxed atmosphere for its tens of thousands of weekly visitors can be provided cost-effectively with the right security.

The venue covers 20,000 m² with an 8,000-seat 24-screen cinema building, and is arranged on two levels around a large public square with restaurants and other concessions. A permanent live stage has been integrated into the main plaza providing music, workshops and children's entertainment all of which required the latest security.

"We wanted an experienced and professional security company to manage and supply the latest technology to interface seamlessly with the current operations at Valencia," said Heron's Operations Director, Andrew Burnie. "We chose County Security Services (CSS), of Southampton for their expert knowledge of the high-tech security industry."

County Security Services (CSS) was brought in at the design stage of the project's final phase that opened in May 2002. The main considerations were:

- Safety first both for hundreds of thousands weekly pedestrians and vehicle users.
- Very large areas being accessed by visitors daily with many parts having limited lines of sight.
- Interfacing security devices correctly throughout, linking CCTV and access control with central control rooms to alert Heron City Staff to potential problems. The security system had to be cost effective, efficient and reduce manpower costs for both operator and tenants.

The Challenges

"Of paramount consideration, right from the outset was Heron International's desire to create a safe environment for the hundreds of thousands of daily visitors. Clearly, post-9/11 we became mindful that the public was no longer just concerned with the usual risks of common crime." said Robert Fiorentino, CSS MD.

The main challenges were potential problems, often caused by the availability of alcohol. They were addressed by using visible security equipment as a deterrent. Others related to effective crowd control for large-scale events, the need for high tech equipment to accurately relay images back to the control centre using the very latest digital recorders and for correct lighting to ensure good visibility when capturing images using CCTV cameras. In addition, the equipment chosen needed to take account of open architecture and the interior design of the complex.

The Solution

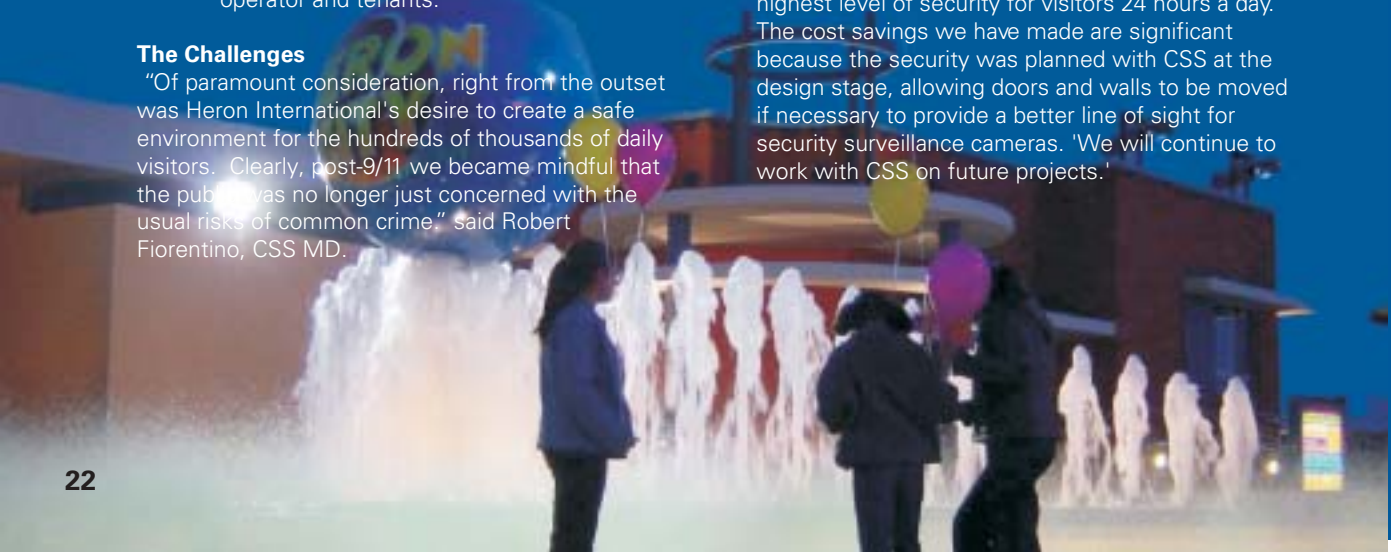
Fiorentino said they were given access to critical information at the planning stage. "I can't stress too much how important it is to be working at the right decision-making level in order to ensure that the client ends up with what they wanted to begin with. That does sound obvious, but it all does come down to effective and relevant communications.

"We worked closely with Andrew Burnie, who was able to share his detailed knowledge of the site at the time of the onsite survey. The detailed on-site survey recommended the equipment required to secure the complex. This included successfully integrating high-tech security equipment and linking this to a central control system to capture high quality images through CCTV cameras and digital recorders."

The security measures now provide maximum security coverage 24 hours a day.

The future

Andrew Burnie was delighted. "The Directors of Heron are confident that the security system at Valencia provides and will continue to provide the highest level of security for visitors 24 hours a day. The cost savings we have made are significant because the security was planned with CSS at the design stage, allowing doors and walls to be moved if necessary to provide a better line of sight for security surveillance cameras. 'We will continue to work with CSS on future projects.'



High-Integrity Security Environments (cont'd)

identity on internal flights in the UK. The use of 2D and 3D facial recognition software, finger, palm print, iris and voice are all viable enabling technologies that are in the process of evaluation for airport and other high security environments at this time.

Some are more acceptable to the travelling public than others. Body scanning technologies have also been developed using passive and active detection of foreign objects using low dosage X-ray and Millimetre wave and other Electromagnetic detection technologies. These are already in use or under evaluation.

Radio Frequency Identification Devices (RFID) offer significant advantages in speed and reliability of obtaining unique identification. Extensive trials have been conducted in the UK to establish the viability of this technology. There are a number of consultancies and suppliers who have a great deal of experience in the application and integration of these technologies into high security environments.

Operational, protocols, procedure and training

Practical operational security protocols, procedures and training are essential factors in the process of ensuring the highest levels of security are attained. Technology is important to aid the process and minimise delay of passengers and cargo. However training at both management and operational levels is critical to ensure that the best use can be made of the human factors that are used to enhance the detection process. Again, UK companies excel in this area to deliver the highest levels of security integrity in an airport environment.



2

The Al Faisaliah Tower in Riyadh, Saudi Arabia

A landmark development in Riyadh, providing a 5-star hotel, a 600 foot tall office building, a large retail mall, an apartment block and a royal banqueting hall for national banquets, conferences and events.

The challenge for UK security company, Security Consortium International, was the requirement to quickly convert the site from one of low security to very high security in the event of major royal functions and visits. All the security equipment had to be architecturally acceptable and of a low profile and high quality appearance.

