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Ministerial Introduction

I am delighted to introduce this brochure, which highlights how UK companies can help to address the security issues that can arise in planning and hosting major events.

2020 was a year like no other: a year in which people adapted to meet novel challenges and opportunities, as a collective, on a global scale. As we move forward, the challenge for businesses will be to look beyond immediate operational issues and to think strategically about the longer-term future. Decisions need to be taken now to help us all to flourish as we emerge from the grip of the pandemic and economies begin to reopen.

The threats posed by terrorism and serious and organised crime are a global concern, and both governments and the private sector continue to seek solutions to ensure the safety and security of their citizens. It isn't just these high-profile threats however that can affect the smooth running of large-scale events. Even minor disruption can impact customer experience and result in a loss of reputation and business.

Companies in the UK's security sector have an enviable reputation around the world for their knowledge and expertise. Drawing on the knowhow of our law enforcement agencies, who have decades of experience supporting Premier League football fixtures, the annual London Marathon, and cultural events such as the Notting Hill Carnival, they design, manufacture and sell best-in-class solutions to address the management and mitigation of security threats.

Produced to exacting British and international standards, UK products are a by-word for quality, reliability and efficiency. The UK is also a leading centre for research and development; our companies are at the forefront of devising sophisticated solutions to the complex problems that the ever-evolving world poses.

Our international network of support is also second-to-none. The Department has staff from both our domestic team in the UK and our international network based around the world to help you. We are here to connect you to the companies that will provide the products and services to address the problems that you face.

I would encourage you to reach out to the UK Defence & Security Exports team in London or at your local British Embassy or Consulate. As you look forward to a revitalised major event landscape in the near future, I hope we can show you UK companies that will help ensure the safety of participants and visitors at your event.

Graham Stuart MP
Minister for Exports
Department for International Trade



Executive Summary

UK industry has a long history of developing innovative products and delivering high-quality services to support international events. Our solutions will help you meet the security challenges and needs of your next successful major event.

Throughout this brochure, we demonstrate some of the capabilities that will address the security concerns at major events such as sporting fixtures, concerts and conferences.

Two highly experienced security professionals share their knowledge on the history and future of securing major events. Reflecting on the UK's experience of securing both large and small-scale events, Colin Morgan, a leading Chartered Security Professional provides insight for event organisers. In a further thought-provoking piece, Deputy Assistant Commissioner Lucy D'Orsi of the Metropolitan Police focuses on the integration of security and policing at major events with a look forward to the innovation and challenges of the future.

To help you deliver a holistic approach to security, this brochure details seven security capabilities, based around the key themes of securing and delivering events where large numbers of visitors are expected:

- Planning & Intelligence Accessing and making use of the right threat intelligence and consultancy to prepare your venue and staff.
- Physical Protection Deploying a combination of overt and covert protective security solutions that keep your visitors safe, while staying in-keeping with your venue aesthetics.

- Screening & Detection Effective highthroughput solutions to prevent crime, detect illicit substances and protect against unwanted threats to your event.
- Reassuring & Visible Security –
 Capabilities to keep visitors safe and
 informed as the event takes place while
 deterring bad behaviour from within.
- Command, Control & Communication –
 Secure control room and communication
 solutions that enhance situational
 awareness throughout an event.
 These capabilities ensure that security
 managers can make and communicate
 effective decisions.
- Incident Response Equipment that allow staff to respond to incidents within your venue while minimising disruption and maintaining the smooth running of the event.
- Cyber Security Protecting networks, devices and data from unauthorised access or criminal use and gathering information on perpetrators where possible. Ensuring confidentiality, integrity, and availability of information.

Each area of these capabilities is illustrated through case studies showing how UK companies are providing the right solutions and expertise to meet customer needs around the world.

At the end, you will find information on how UK Defence & Security Exports supports UK businesses and our overseas customers, and links to online resources and contact information so that we can help you with your next project.



Our Experience

Colin Morgan CSyP is the former Head of the Public Order Branch at the Metropolitan Police and subsequently Head of Security at Lord's Cricket Ground. Here, he offers his perspective on the UK's experience in securing major events.

The UK has a strong reputation for delivering secure events to a world-class standard over a number of years and across a number of sectors, including top tier sporting tournaments such as the Olympic Games, highly secure political events, annual events such as Notting Hill Carnival, and Glastonbury Festival, and weekly elite sporting fixtures.

With many high-profile international events taking place in the near future, including the 2021 G7 summit, European Nations Cup Final, COP26 and the 2023 UEFA Champions League Final, we will continue to develop and deliver our world-class security for major events. The UK's reputation is built upon delivering effective, proportionate and tested multi-agency security. We have learnt from experience to implement novel techniques and products that mitigate identified security risks.

For those planning and delivering a safe and secure event, what advice can I give?

Know and understand the threats you face.

The risks to every event will be different. Having too little security increases the chance of an attack; having too much increases costs and can intimidate your customers. You need a response proportionate to the threat. Engage with, or employ, professionals who can provide you with the relevant threat assessments to inform your security procedures. Use these to think "what if?" and then plan, test and refine your operations accordingly.

Think of security in the round If the physical, personnel and cyber security issues are not considered together, gaps will appear. To ensure a holistic approach to security these must be managed in an integrated manner. If you don't have the expertise within your organisation, look for consultants who can give you the advice you need. The UK Government has worked with professional bodies to promote high standards and ongoing proficiency through accreditation of Chartered Security Professionals (CSyP) and the Register of Security Engineers & Specialists.

Invest in your people. It may be a cliché, but your people are your biggest asset. As well as identifying and dealing with hostile actors they add value to your event by delivering excellent customer service. I tell clients that, "good customer service equals good security". Engaged staff reassure customers ensuring they return to your venue. The visible presence of security staff can also deter bad actors who fear detection. Train, empower and support your staff to be the very best they can be; you will reap the benefits.

Use the right equipment and technology.

There are a huge number of security-related products on the global market right now. In deciding what to choose, ensure that you commission equipment and technology that will support the efforts of your people. Make sure that it fits with the operational requirements of your event and the threats you face.

The UK has successful history of delivering safe and secure events, continually learning from our experiences. We can offer tried and tested products and services to make your events and locations safer as well as more appealing to your current and future customers."



A Forward Look

Deputy Assistant Commissioner Lucy D'Orsi from the Metropolitan Police is the UK national counter terrorism lead for protective security. Here, she offers her perspective on the future of securing major events.

"I have spent many years policing major events in London, from State Visits and significant protests, to complex multi-agency operations such as the NATO Leaders' Summit in December 2019. Over the last 15 years I have seen a number of major changes effect these events. These have required us to develop new approaches to security; this will only continue.

For those planning future events, what advice can I give?

It all starts with planning. We have already started to see how improved technology can be used to test and refine our plans. Access to high quality data will allow us to effectively map and predict crowd movements. This will feed into digital training environments which allow us to deliver better virtual training and tabletop exercises for our staff.

Create a hostile environment. While you want your customers to feel safe and secure, you need to deter terrorists and criminals from your event. Positive advances in areas such as unmanned aerial vehicle (UAV) use and facial recognition software will provide faster intelligence and greater strategic oversight to event organisers. In the future we will see greater use of machine-learning to detect anomalous behaviour and prioritise intervention.

Work together. Closer ties between police, government and the private sector has greatly improved safety and security at major events. We have moved from working in parallel to integrating plans and resources. Ensuring the approach continues to be collaborative and interoperable will help realise greater efficiencies in major event security. I hope that through joint training, particularly at a command level, police will have the confidence to empower and entrust delivery of more protective security to the private sector.

Engage with the community. By working closely with the community, police and organisers benefit from greater intelligence while attendees get better event information in return. So often the mantra in the intelligence world is about 'need to know'. In the future, this principle must be reversed. Greater transparency of information enhances the legitimacy of security operations and provides greater confidence to the public. We must adopt a 'need to share' approach that enables police to share information with commercial operators so they can play their part in national security.

Learn from the past. To paraphrase George Santayana, "those who cannot learn from history are doomed to repeat it". Organisational learning is important if we are to continue to evolve our ability to deliver secure major events. I have seen many reports with sensible recommendations for improvement, but we haven't always implemented them. In the future, we must invest in the librarians of this learning, but also move quickly to a digital system that presents these for future event planning and delivery.

UK security, delivered by both the police and the private sector, continues to develop and keep pace with the challenges we face. I am confident that this will continue in the future alongside UK industry's drive to bring new technology and innovation to the security of major events."



Major Event Security

Cyber Security

The UK consistently ranks in the global top three nations in terms of its cyber security capability, and UK companies are at the forefront of providing solutions that protect large-scale events from disruption by cyber-attack.

Reassuring & Visible Security

UK providers can supply training programmes that will equip your security staff with the skills that they need to keep visitors to your venue safe and to control access to non-public areas appropriately. UK companies also offer sophisticated software solutions utilising mobile technology to enhance security at venues.

Planning & Intelligence

UK companies have a long track record of planning successful large-scale events and can support your efforts. They can help you to organise simulated scenarios and bring their knowledge gained from past experience to bear.

Screening & Detection

UK companies produce sophisticated products including x-ray scanners, equipment to detect chemical residues and drones that can observe the movement of visitors to your venue, as well as offering softer solutions including programmes to equip your security staff with the skills that they need to spot bad actors entering your venue.

Physical Protection

The UK can provide products to secure your site, ranging from fences, turnstiles and reinforced street furniture manufactured to be inconspicuous to advanced ballistic glass.

Incident Response

Command, Control & Communication

virtually are also available.

Several UK companies can provide you with complete fixed or mobile command and control

packages for your event with features such as

secure communications and sensor suites.

Distributed solutions to manage your venue

UK security companies can help you to develop multi-agency frameworks to allow you to respond to incidents at venues quickly and decisively, as well as ground-breaking technologies to support that response.



Planning & Intelligence

Effective planning and coordination efforts are not perceived by visitors, but they will impact their experience during the event. It is well known that the majority of your customers will want to enter your venue less than half an hour before the start of the event.

Managing this large peak outside your site, at entrances and in your food and beverage outlets needs intelligence and careful route management. Working closely with local agencies including law enforcement, local government and public transport providers in advance of events is also key and represents a vital component of the planning process.

Reviewing and updating plans based on tabletop exercises is an important tool in your planning process, however applying the knowledge gained from past experience is key. This can either be from conducting simulated training exercises at your site, or by learning lessons from other venues. In the UK we have demonstrated the effective planning of major events in every possible scenario; from the successful delivery of the Olympic and Paralympic Games (involving 34 sporting venues) through to the large-scale annual music festivals which attract fans to areas with little fixed infrastructure in relatively remote locations.

Risk Modelling Case Study

Effective command and control activity requires a great deal of forward planning including risk analysis, mapping out responses and mitigation planning. This then needs to be communicated to those who may have to respond through training and simulated exercises. UK company, Riskaware, have worked with industry experts for over 20 years to create models that simulate the behaviour and impact of chemical, biological, radiological, nuclear and explosive (CBRNE) incidents in an urban environment. This provides event organisers with the ability to take control of their event.

The company's UrbanAware platform is a leading situational awareness and decision support tool. It is built on a hazard assessment, simulation and prediction model initially developed by the UK MOD and US DoD. This fusion of data and modelling is used by security managers around the world to understand how a CBRNE event may spread through a venue. This allows you to put in place appropriate control procedures as well as effectively manage your response, both during an event and afterwards.

Stoke Park Westbury on Tryn Horleid Lockleaze Spir Park State Henleare Stapleton Fishponds Formula, Nerfex Tolkoutin Formula, Nerfex Tolkoutin

Planning Case Study

Investing in technology and planning are key steps to delivering a successful event, however testing that plan and which technology or response is required is vital. There are two sides to managing the risk inherent in every plan. On one side, individuals and teams need to behave and prepare in a way which allows them to be agile and resilient; on the other, the plan itself needs to be simple and flexible enough to adjust and evolve in response to the unexpected. It needs to be understood by those delivering it and it needs to be realistic.

Based on techniques developed in the British Army, UK-company Evocatus Consulting uses games and live exercises to develop and test plans. Working with multi-agency partners including law enforcement, stewarding and public transport achieves a range of benefits including accounting for elements of uncertainty and simulating the action of the plan, testing resources and identifying challenges using a simulated environment. The shared experience these exercises provide is also a valuable opportunity to bring stakeholders together, building relationships before they are tested during a real event.





Physical Protection

A site's physical protection is an opportunity to define the user experience and will be remembered by those attending the event.

When done well, visitors feel reassured by the safe environment provided, and evidence shows they are more likely to come back. If they do not feel safe, they are unlikely to return and additionally may use social media to let others know about their poor experience and this can negatively impact your event's reputation.

Protecting venue infrastructure, along with the visiting public, can be anything from simple overt solutions such as fences and turnstiles to more sophisticated covert products, such as ballistic glass built into the environment. Physical protection keeps it all secure.

With an increase in temporary events ranging from small pop-up music festivals through to the Olympic Games, new challenges have emerged, especially where physical protection is not built in. UK companies have the experience and are able to innovate to meet this challenge and deliver the right solution to suit your venue, providing a range of solutions designed to adapt to the developing risk. As one example, to keep pace with emerging threats new and innovative thinking on rapidly deployable Hostile Vehicle Mitigation (HVM), is an area of UK expertise that is keeping people safe.

Hostile Vehicle Mitigation Case Study

Following an increase in 'vehicle as a weapon' attacks around the world, both major event organisers and local authorities have been looking at how to secure pedestrian-only spaces.

One of these is Cavill Avenue, a street and pedestrian mall forming the heart of Surfers Paradise on Australia's Gold Coast. In 2020, Heald, one of the UK's leading designers and manufacturers of innovative security solutions, in partnership with their Australian distribution partners GK Solutions, worked with the council to secure the area using their Matador sliding bollard solution.

The Matador is the world's only sliding bollard solution. The ingenious design means that it can be installed via a shallow or surface mount. Alternatively, the system can be attached to a temporary base for short term use at events, for example the 2018 World Snooker Championships held in Sheffield's Crucible. The design addresses issues faced with excavation, while still providing quick automated access for cleaning, delivery and emergency vehicles.

Heald's hostile vehicle mitigation systems secure some of the world's most high-profile buildings, events and pedestrianised areas. By blending sympathetic design with best-inclass protection, visitors feel reassured. This is just one example of how UK companies can help with your physical protection needs.





Screening & Detection

A venue's security screening staff are often the first engagement a member of the public has with the team on site. Ensuring these staff are friendly and welcoming, while also being diligent in their screening, reduces tension and contributes to maintaining a safe environment for your event.

Choosing the right equipment also has a great impact. If the detection equipment at the venue entrance has a low throughput, customers can become frustrated at having to queue and this static group of people can also present a target to terrorists. High-throughput screening requires a blend of the latest technology including CCTV, body-worn cameras and facial recognition working in conjunction with advanced machine-learning for automated threat detection.

Effectively blending the use of equipment with trained security officers is key to spotting threats and managing situations calmly. For instance, when incorporated into your existing security measures, behavioural detection is a powerful tool that can be implemented in a range of environments.

People with hostile intent may exhibit overt cues which properly trained staff will recognise. However, this situational awareness also allows them to provide other assistance to your visitors. For instance, people behaving unusually compared to others around them may be because they are lost or need help for other reasons. This all ensures that security screening supports the overall aim of putting on a safe and successful event.

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When planning your screening systems, the key question to answer is, what are you looking to detect? This may vary for different environments and may include novel threats such as drones, either as a nuisance or an intentional threat. In addition, while you may allow your customers to bring in their own food and drink, what about banners and flags? Once you've clearly outlined your operational requirements you can use this to determine the right scanning and detection capabilities and procedures.

Counter-UAV Case Study

The unknown threat is always the most difficult to counter. Hostile use of unmanned aerial vehicles (UAV) against major events is a real threat, especially as payload capacity increases. There might be nothing more than a camera on the 'drone', but this can still cause serious problems, both from a security and a reputational perspective.

Geo-fencing can reduce many nuisance-causing domestic devices, but it will not stop a determined malicious actor. Counter-UAV equipment that can quickly detect, track and identify potential threats, as well as those that can safely disrupt them, are now becoming a feature of major events. SteelRock Technologies specialises in C-UAV products to mitigate the threat from both multi-rotor and fixed-wing drones. Through highly directional technology SteelRock can command the target to hover in place, return to its original location, or descend safely to ground for recovery and analysis.

Using a solution which has been extensively tested in the real world is essential to know if it can be reliably deployed when needed. Following extensive trials by UK Government agencies, SteelRock's system is currently in operation around the UK, protecting critical infrastructure, airports, VIPs and public events. Working with UK Defence & Security Exports, SteelRock has now secured its first export to a European Special Forces unit.



Behavioural Detection Case Study

Training your security operators, whether they are operating bag search or observing CCTV is a vital function of major event security. UK agencies and industry work together to develop a courses and resources for security operatives. Developed through joint work with police, crime agencies and specialists, behavioural detection skills combine established principles with innovative learning.

Many UK security consultancies provide advice and venue threat assessments leading up to major events around the world. Some, like Marshall Kent, also provide awareness courses delivered at the venue for security operatives in preparation for specific events. Through short, focused briefings staff receive up to date threat information, an understanding of how a hostile may approach a particular venue or event and how to recognise and respond to suspicious or hostile behaviour. The courses include content endorsed by UK crime and counter terrorism agencies and are built upon the techniques successfully deployed at major events and policing operations to protect crowded places.

Developing skills and techniques to understand the type of hostile individual who might visit a venue/ event and how to identify their behaviours are vital to preventing hostile actions at a major event and bring additional benefit through identifying people in need of assistance. Through Marshall's established reputation in this sector, they have been working with overseas venues to develop their capability using these exportable principles and courses.



Reassuring & Visible Security

Visible security is reassuring for customers as they enter the event but becomes intrusive once the event is underway. An appropriate combination of technology and stewarding is crucial to maintaining safety at an event.

When all is well, stewards and security officers blend into the environment but they are constantly reading the crowd, ready to respond. By isolating troublemakers quickly, your staff can remove individuals from the crowd before their behaviour escalates and influences other groups.

As well as keeping an audience safe, controlling access to non-public areas is a key function for security officers. Your performers and their entourage need to feel safe, while having the space to prepare away from the general public. This may require your staff to work with close protection officers or other external security professionals.

Good stewarding is achieved by developing the capability and knowledge of staff. Through close engagement between Government and the industry, the UK has developed robust training standards that ensure that all licensed stewards understand how they maintain the safety and security of the event. This in turn means that police resources are not engaged in managing the crowd but instead focused on more proactive activities outside the event.

App Support Case Study

While stewards provide the backbone of your situational awareness around the event site, the crowd is now playing a greater role in the safe operation of a major event. This is mainly thanks to the increasing use of smartphones. From being able to quickly report an unattended bag, through to receiving up to date instructions from stewards, the public can now be more closely engaged with your event through technology.

Supported by UK Government funding through the Defence and Security Accelerator, Krowdthink Ltd have developed 'The Krowd' smartphone app. This allows people to report incidents directly to event organisers in real-time. For instance, images sent via the app can help the security team to visualise and assess a threat, and by using a 3D visualisation of the venue a security manager can locate it and rapidly direct staff to the situation.

In addition, security staff can send messages to the public, providing alerts to notify them of an emerging threat situation if required, provide updates and ultimately to issue instructions for them to either to shelter in place or exit a venue via prescribed routes. Technology like this integrates with existing security platforms, helping to make crowded places and events safer.



Support Services Case Study

While it is obvious that no two Olympic games will be the same, even regular domestic major events bring about challenges that can vary from occasion to occasion. Whether it's a Premier League football match, sell-out music concert, or trade conference, the quality and depth of training is paramount for creating a secure environment. As each presents its own challenge, UK companies have developed expertise and capability to take each event in our stride while providing spectator safety at some of the world's most iconic venues.

One of the UK companies working in this area, Stadium Ltd, has been creating safe and secure environments at venues for over 10 years, delivering the complete staffing spectrum from recruitment and training through to deployment. This ensures peace of mind for event organisers and organising committees. For instance, since 2019 they have provided security services and HVM barriers to NFL events in London. Initially designed around Wembley Stadium, the system was reconfigured for an expanded programme of fixtures held at the Tottenham Hotspur football stadium. Events at both venues were highly successful, with over half a million fans in attendance overall.

Stadium Ltd, like a number of UK companies supporting the events industry, has a reputation built on many years of hard work developing trust and reliability within the sector. Through a 'lessons learnt' approach, they continue to develop their understanding and ensure that their service delivery continues to improve. This is just one example of a UK company sharing their knowledge and experience to maintain safe event environments around the world.



Command, Control & Communication

There are a range of scenarios you might have to react to during an event, from a child going missing to a confrontation between spectators. A good fixed or mobile control-room equipped with the technology to visualise the incoming data enhances your situational awareness, enables you to respond effectively and improves customer satisfaction.

When supported by robust processes, your command-and-control infrastructure enables effective communication throughout the venue and with outside agencies or partners. Comprehensive training also ensures staff can filter out irrelevant information and make the right decision. UK companies have experience delivering scalable solutions in this area across a range of event types.

Increasingly, different modes of communication are being used in parallel at venues. For example, while fixed CCTV systems have been in use for decades, body-worn cameras are now providing greater flexibility and real-time visual intelligence. However, communicating this information to others requires an increased bandwidth to stream the data.

By moving radio networks to cellular infrastructure, events benefit from faster and more secure communications over an increased range. UK event organisers and emergency services are making use of new mobile antennae, as well as simple to use devices, for front line staff. These increase the available bandwidth on site and allow clear voice and video to be live streamed, quickly and securely to those that need to see it.

Directing visitors to an alternate entrance or exit if there are problems is a common occurrence at events. By communicating instructions quickly panic amongst visitors can be mitigated and, in an age of social media, can ensure that misinformation does not spread. Good local and site-wide public address systems also allow you to keep control and keep customers safe.

Mobile Control Case Study

As the size and type of an event can vary widely, event organisers are looking for multi-role command room options. Command rooms require key features, including camera and radar surveillance feeds and communcation links, which has previously required a static location. During pop-up or events at temporary venues, this normally presents a challenge.

In the UK, FLIR Systems have developed a rapidly deployable command centre by utilising a standard commercial pickup. The Light Vehicle Surveillance System (LVSS) enables major event operators to support remote, pop-up or relocated events with the infrastructure of a major venue but portable. All FLIR cameras, radar and sensors can be stored out of sight for covert travel to the next event. This vehicle solution can be highly portable, use different sensors or be scaled for larger events.

Events of any scale can benefit from this solution, whether to extend coverage or deal with a particular area of concern and can be used to equip a remote venue with the tools and facilities of a larger venue.



Communication Case Study

Establishing and maintaining a common operating picture to inform decision making is a significant challenge for major event organisers. Hybrid radio networks, dispatcher and log platforms, that were previously the preserve of the emergency services, have transformed the communications capability for major events enabling greater real time situational awareness.

Internet based connectivity between voice users has only become reliable in recent years for the demanding event user. The maturity of hybrid radio networks and Push to Talk Over Cellular (PTTOC) has been further advanced during the response to COVID-19 where the need for social distancing, efficient and well-coordinated communications has led to a greater use of virtual control rooms with communications centred around the user.

UK events company, Controlled Events, specialise in delivering event command and control capabilities which have been used at international events in Oman, USA, Bermuda, Australia and Europe. Controlled Events recently delivered a hybrid radio network and push-to-talk solution to global sports league SailGP. The benefits involved improved situational awareness for the event team, better sustainability with fewer personnel on site, budget efficiencies and a reduced number of co-located resources on site.

Command Case Study

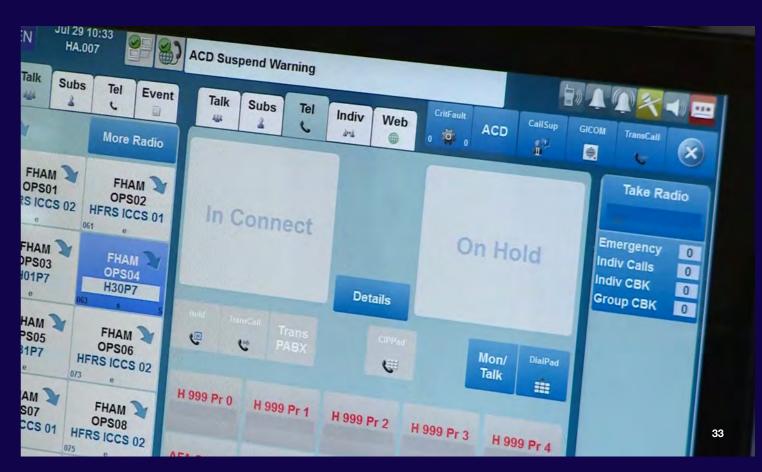
A major event has a lot of separate pieces to manage. To maintain effective command, integrated technological solutions are now vital to the safe and effective operation of any event. During an event you need a platform that ensures that resources with the right skills, equipment, incident knowledge and experience are safely and quickly despatched to where they're required. By providing commanders with a single, common operating picture, incidents that occur within the event location can be dealt with swiftly, whilst still managing the day-to-day response across the wider environment.

For over 30 years Capita have been supplying integrated Command, Control and Communication solutions to public safety agencies to support both day-to-day operations and major, planned events on a global stage.

Their solution combines secure communications, detailed mapping and intelligent searches of connected data sources. Coupling this with live tracking of assets, CCTV feeds, sensor-driven alarms from connected devices and the ability to live-stream video from mobile devices ensures full situational awareness within the control room. With a fully integrated mobile capability, responding resources can be kept fully informed as incidents unfold and can provide updates from scene as appropriate.

These solutions are tried and tested in major metropolitan police and emergency services around the world. They have been used at global events such as the 2000 Olympics in Sydney Australia; 2014 & 2018 Commonwealth Games, as well as at major single-sport events such as Premier League football in Birmingham and Manchester. As well as sporting events, Capita have provided these secure communication solutions for policing at festivals such as Glastonbury and at New Year's Eve celebrations.







Incident Response

The speed of escalation and potential for rapidly deteriorating conditions during any kind of incident is most keenly felt during a mass gathering.

Early intervention is required to prevent this escalation and protect life, ensure the safety of your customers and staff, and reduce the impact on your event. The development of technologies that enable this quick response, is an area that the UK excels in.

Some incidents will need to be passed over to outside agencies, and so event coordinators need to be empowered to make these decisions and have the confidence to carry them out. The ability to pass information and awareness to the emergency services, get responders in, and return the area to normal as quickly as possible helps you to deliver a successful event.

The links between effective incident response and good planning are clear. By establishing strong links with stakeholders before your event and conducting collaborative training and exercising with them, any emergency response will be smoother should an incident occur. A return to normality will also be achieved more quickly.

Interoperability Case Study

The UK has developed multi-agency response capabilities adapted through decades of active engagement with agencies and venue operators. Our capacity to integrate response across organisations from the Police to Mountain Rescue comes from a range of tried and tested measures. Through regular multi-agency training and the exchange of resources, teams learn to work more effectively together. This ensures a more agile and robust response to challenging situations.

The initial response to a serious incident at your event, or a smaller situation that is at risk of escalating if not handled promptly, will require clear communication from your front-line staff to your command centre and back out again. Through the use of the widely adopted M/ETHANE model for passing information between multiple agencies, the UK has enhanced the interoperability of teams.

Response Platform Case Study

When responding in the enclosed areas of a stadium, the use of traditional petrol or diesel-powered vehicles presents additional challenges to the incident through limited access or emissions. By using compact or ultra-low/zero emissions vehicles, this hazard is mitigated and capabilities such as Medical First Responder and rapid intervention firefighting can be moved around quickly.

UK fire appliance manufacturer, Angloco, designs and manufactures bespoke specialist ultra-compact and zero emissions vehicles for access to pedestrianised areas, inside large buildings and stadia. This enables a rapid response in challenging conditions to enable the initial attach to be swift and effective.

Vehicles can be multi-role incorporating fire, security and paramedic capabilities. However, the key to successful deployment of this type of capability is that it works seamlessly with your wider emergency response plan, should the incident escalate. Angloco build bespoke high-quality solutions which can meet the needs of the event from a budget, and capability perspective.







Cyber Security

Cyber-attacks which are intended to disrupt events are a significant and increasing threat and can involve nation states as well as cyber criminals and online activists. The management of large-scale events increasingly relies on a backbone of complex information technology infrastructure and if this is successfully targeted the consequences can be difficult to mitigate.

Recent examples include a cyber-attack during the opening ceremony of the PyeongChang Winter Olympics which caused 12 hours of disruption and was a state-sponsored attack, as identified by the UK's National Cyber Security Centre (NCSC).

Effective cyber security should contribute to the overall security and success of the event. In preparation for any major event the NCSC recommend a three-step approach; a Discovery phase, a Risk Management process, and Cyber Incident Response planning. These activities support the development of an incident management capability that encourages people, process, and technical elements to work in partnership to respond to any cyber security incidents before, during and after any major event.

The UK consistently ranks in the top three countries for cyber-security capability across a range of areas. Companies in the sector have provided support to some of the world's largest music and sporting events, including successive Olympics Games. This experience enables UK industry to lead in the development of technology and solutions that reduce the risk of cyber threats and to respond effectively to any cyber incidents that do occur.

Capacity Building Case Study

UK company the Cyber Capacity Unit (CCU) was set up to provide programme oversight to major event organisers and critical national infrastructure. CCU's founding directors played a central role in the cyber security preparations for the London 2012 Olympics. A long-term focus has been on advising the most senior officials responsible for the Tokyo Olympic Games, which is considered to be the most technologically advanced in history, and thus uniquely vulnerable to cyber-attack.

As well as assisting major events, the CCU team works on a variety of national cyber capacity building initiatives, working closely with government ministries, security agencies, critical national infrastructure organisations and across areas such as healthcare, energy, transport and defence. UK companies such as CCU and its competitors are ready to provide advice and capabilities to keep your next event secure in the cyber as well as physical space.



About Us

As part of the Department for International Trade, UK Defence & Security Exports' role is to help the UK's defence and security companies to export, and to provide the specialist advice and practical assistance that overseas buyers need.

We do this by building close relationships with industry and with overseas governments as well as working closely with our own Government departments including the Home Office the Ministry of Defence, the Foreign, Commonwealth and Development Office and others.

In addition to the military, security, fire and resilience specialists in the Department we also work through a network of over 3,000 trade staff based in our Embassies, High Commissions and Consulates around the world. We also support the major trade shows for the defence, security and cyber security sectors that that take place in the UK and overseas.

Next Steps

If you are interested in any of the capabilities presented here, our security industry stands ready to help. The depth of knowledge and expertise that companies in the UK provide can help you to keep your next major event safe and secure from threats.

For further information, please contact the UK Defence & Security Exports staff locally or the team in London. We are ready to help.



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About Our Contributors

Until 2016 Colin Morgan CSyP was a Chief Superintendent in London's Metropolitan Police. His last role was as Head of the Public Order Branch where he oversaw policing the highest profile sporting fixtures and cultural events across the city.

Since leaving the police, Colin has held positions including Head of Security for the world-famous Lord's Cricket Ground and for the City of London Corporation. Colin now runs Colin Morgan Consulting and offers impartial security advice to public and private sector organisations throughout the world.

Deputy Assistant Commissioner Lucy D'Orsi from London's Metropolitan Police is the UK National Counter Terrorism lead for protective security and preparedness. She leads on Royalty & Specialist Protection; Parliamentary & Diplomatic Protection; Aviation Policing and Protective Security Operations.

Lucy is a highly experienced Public Order Commander, leading the policing operations for the visit from Chinese President Xi Jinping in 2015 and London's New Year's Eve celebrations. More recently she led on the 2019 State Visit of President Trump and NATO Leaders' Summit. Lucy is also the UK policing lead for Taser and countering the threat from drones.

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