



**sgw**

planning today  
PROTECTING TOMORROW

# About Us

Since 2003, SGW has been providing independent security and safety consultancy, risk management, security engineering and CCTV consultancy services to the built environment.

With resources in the UK and Middle East, we are easily able to deliver projects for clients with divergent business operations including; architects, developers, financial institutions, FM providers and engineering consultancies.

We have successfully delivered international projects in China, the Kingdom of Saudi Arabia, Kuwait, Libya, Morocco, Nigeria, Qatar, Russia, the United Arab Emirates and Uzbekistan, among others. Plans include further strengthening our human resource capability and the existing training course portfolio, together collaborating with the higher education sector in security research initiatives.

At SGW, our people have a wide range of experience, qualifications and skills that allow seamless collaboration to provide a high-level service to our clients. It is the diversity of skills, backgrounds and areas of expertise that helps to separate us from the competition.

Our team of security specialists have a broad range of qualifications and certification including post-graduate master's degrees in Security and Risk Management, and Engineering; Physical Security Professionals (PSP) and Certified Protection Professionals (CPP) from ASIS; Chartered Security Professionals (CSyP), as well as other high-standard qualifications in security surveying, risk management, counter-terrorism, electronic engineering, engineering and data communication & networks.

Team members are also heavily involved in industry innovation, offering their insight within recognised organisations such as ASIS, the Security Institute at Member and Fellow level, the Register of Security Engineers and Specialists (RSES), and the Association of Security Consultants (ASC).



**Simon Whitehouse**  
CSyP FSyI CPP PSP  
MIET RISC MIAPSC  
Managing Director



Consultants, project managers and trainers working in SGW's team hold recognised qualifications, certifications and professional registration appropriate to the security profession.

## Customer Testimonials

“ I have been impressed by SGW's knowledge, professionalism and attention to detail. The comprehensiveness of their audit and the clear recommendations within their report has allowed us to confidently develop our strategic investment plans for CCTV across the organisation and rationalise our maintenance and support going forward.”



**Trevor Nelms**  
Director of Business Technology  
West London NHS Trust

“ SGW provided a very impressive bid for the work at Queen Mary beating some of the industry's most prestigious competition. They have impressed on every level since their appointment. We are confident that they have the expertise and the experience to support us in enhancing the safety and security of our 24-hour multiple-site campus environments.”



**Steven Exley MSc FSyI**  
Assistant Director Estates and Facilities  
(Residential Services)

“ SGW provided comprehensive expert technical advice for a detailed options study for Command & Control Centre Remodelling & Expansion Project. Their ability to work productively with people at all levels, e.g. chief officers, contractors, public authority departments etc. to design a successful project was highly impressive. I would have no hesitation in recommending SGW to other public-sector organisations.”



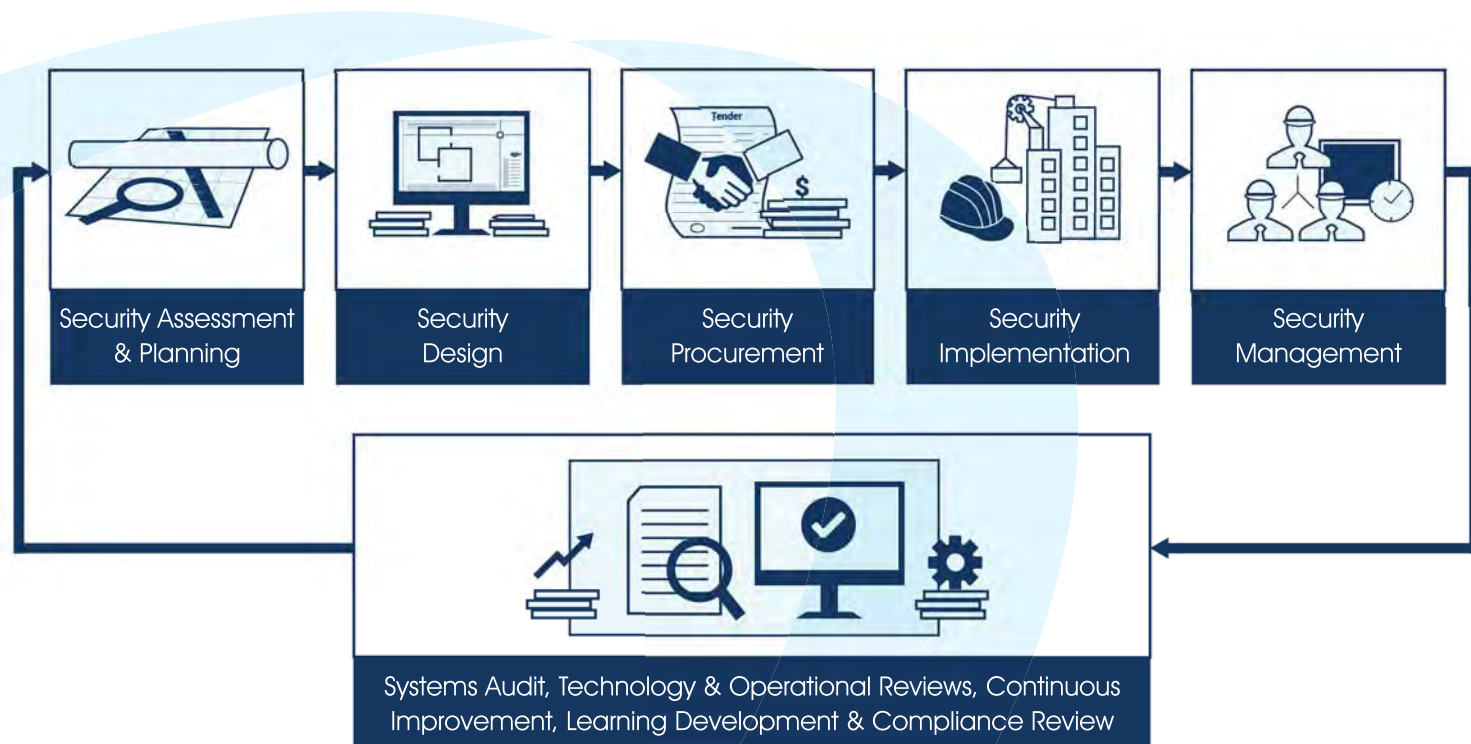
**Reg New**  
Safer Travel Officer (Projects)  
Transport for West Midlands



# Consultancy Services

## How We Work

At SGW, we adopt a client-focused approach, ensuring we understand the project needs from the outset. This guarantees we can provide the best, and most relevant, service-offering that meets the client's requirements. From the initial stakeholder meeting, we work together, following a structured project framework. This often incorporates the RIBA 2013 Work Stages, although we are flexible enough to apply other frameworks. With specialists in several security-related domains, we can provide consistent support and expertise to the client throughout the lifecycle of any sized project from 'Strategic Definition' to 'Handover and Close Out'.



## Security Risk Management

Our Security Risk Management approach is based around the client's organisation, environment and specific needs. We understand that 'Risk' is subjective, with specific threats relevant to specific contexts. We provide a systematic evaluation of relevant threat types, allowing clients to structure their own security function accordingly, saving time and unnecessary resource spend.

We create a Risk Management framework that assesses the environmental context and takes the process through identification, analysis and evaluation. This allows the client to use appropriate techniques, tools and counter-measures that are cost-effective and commensurate to protecting valuable assets including people, property, reputation and information.

SGW employs a comprehensive risk methodology based on the industry respected Comparative Risk Assessment Model (CRAM) tool. CRAM is a decision-making tool used to systematically measure, compare and rank areas of risk. Its use is not confined to any one industry or commercial sector: it has utility in all areas of the Security Risk domain and across all business sectors.

CRAM's principal benefits are;

- An objective approach to Security Risk Management.
- A rationalised basis for Security Planning.
- Prioritisation of resources and mitigation measures as required through a comparative process.
- Bespoke to the scale and complexity of the project or customer.

A consistent approach to the evaluation of risks across multiple sites.

**Risk Rating = Likelihood x Severity**

	Catastrophic	5	5	10	15	20	25
Severity	Significant	4	4	8	12	16	20
	Moderate	3	3	6	9	12	15
	Low	2	2	4	6	8	10
	Negligible	1	1	2	3	4	5
			1	2	3	4	5
			Improbable	Remote	Occasional	Probable	Frequent
			Likelihood				

Catastrophic: STOP  
 Unacceptable: URGENT ACTION  
 Undesirable: ACTION  
 Acceptable: MONITOR  
 Desirable: NO ACTION





## Consultancy Services

### Security Design & Engineering Consultancy

Following the completion of the Operational Requirements (OR 1 and OR2), SGW provides consultancy support and engineering design for electronic, physical and environmental security systems. Perimeter Intruder Detection Systems (PIDS) are often a key component of the security strategy for a high security site which is not located in the public domain. A Perimeter Intruder Detection System allows you to monitor your sites extremities as part of a deter, detect, delay and deny strategy.

SGW assess and recommend appropriate technology from unbiased viewpoint to protect perimeter plot extents, determining the technology which should be utilised to alert your security systems to unauthorised entry at the outermost defence of your site.

Upon completion of the design phase, SGW's Security Tender Documentation Package aims to provide a robust set of Tender Documentation for the issuance to pre-qualified and selected Security contractors and integrators. This documentation can be included within and /or as part of the security Detailed Specification for security systems integrator to provide a compliance response and provide a pricing based upon the required maintenance requirements.

### CAD & BIM

At SGW, we recognise that Computer Aided Design (CAD) and Building Information Modelling (BIM) is an important component in the design process for any security project and therefore we are delighted to offer the highest technology and capability resources in house.

Auto CAD is used to create conceptual design, product layout, strength and dynamic analysis of assembly and the manufacturing processes themselves. CAD enables us to produce detailed security engineering designs through 2D and 3D drawings of the physical components of manufactured products and to prepare environmental impact reports, Computer-aided designs are used in photographs to

produce a rendering of the appearance when the new structures are built.

A BIM object is a repository of information that holds data in accordance with a 2D and 3D geometry description of the actual product or component. The information container also holds knowledge such as EAN-codes, U-values, sizes and branding like logo and family names. Although BIM can be used for 2D, 3D, 4D, 5D and 6D, SGW primarily use it for 3D drawings and animation, allowing the security drawings to come to life.

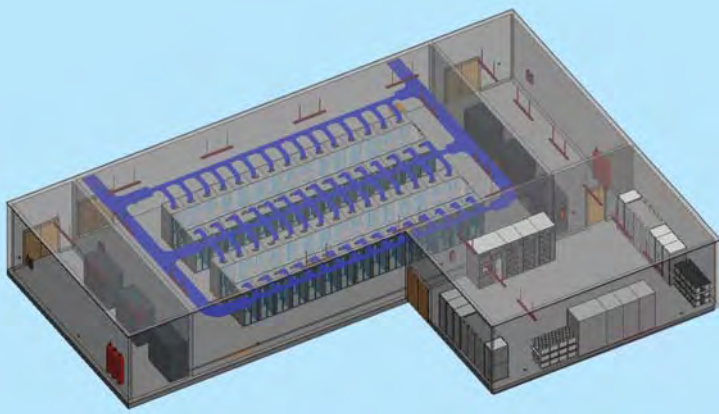
### System Upgrades

One of SGW's core services, is supporting the end user to leverage sustainability and value of Legacy Systems. This is an area, which is often a key differentiator between independent security consultant and installation contractors. Installers and manufacturers generally want to sell as much new hardware and software as software as possible, to generate more revenue and to simplify the complexity of service and maintenance regimes. This approach does not always protect the sustainability of the system, the clients budget or address pre-agreed Operational Requirements.

SGW's engineers work for the client, to undertake detailed dilapidation and conditional surveys of security and surveillance systems hardware and software, often applying the analogy of 'if it's not broken, don't try to fix it', but providing sufficient detail in our dilapidation reports and drawings to help the client make an informed decision as to where to channel expenditure and prioritise capital and revenue budgets with a 'Must Do', 'Should Do' and 'Could Do' approach to making improvements to the security and surveillance systems in operation.

Having systems engineering knowhow, SGW take time at conditional survey stage, to understand existing legacy system cabling, network and infrastructure constraints, which could impact on the final design of a system upgrade.





## Consultancy Services

### Video Surveillance Systems Consultancy

Early exposure to multiple town and city centre public space surveillance projects in the late 1990's, means our consulting team, of UK origin have in depth experience of design and engineering of surveillance networks covering wide areas, comprising of many circuits and endpoints. These projects often involve a multi-disciplinary approach far more than video, data and audio technology design. Discipline expertise which includes civil engineering, fibre optic engineering, wireless network engineering and building services engineering ('for control room environments') has been gained by SGW's personnel, with many valuable 'lessons learnt' situations which have gone behind us, from previous successfully completed assignments.

SGW have been providing CCTV Consultancy Services internationally since 2003. During that time, our CCTV Consultancy Team have applied our independence and unbiased approach, to support many public and private sector organisations to progress CCTV Feasibility Studies and Documented Operational Requirements.

### Control Room Design

SGW's Consultants have for many years been at the forefront of control room design and development, for both private and public-sector clients. Our experience has been built on strong foundations - from the many command and control room projects undertaken by our team, together with invaluable 'lessons learnt' over the last two decades.

Our design engineers will use their knowledge of ergonomics and control room design, workflow, operator's roles, and priorities as well as technology needs, to ensure the most efficient use of the working space available. We will conduct a site survey and provide you with 3D concept drawings of how your control room could look (for larger projects we also offer animated walkthroughs).

We will then discuss with you how your concept will be realised and what services we can provide to make the process run smoothly.

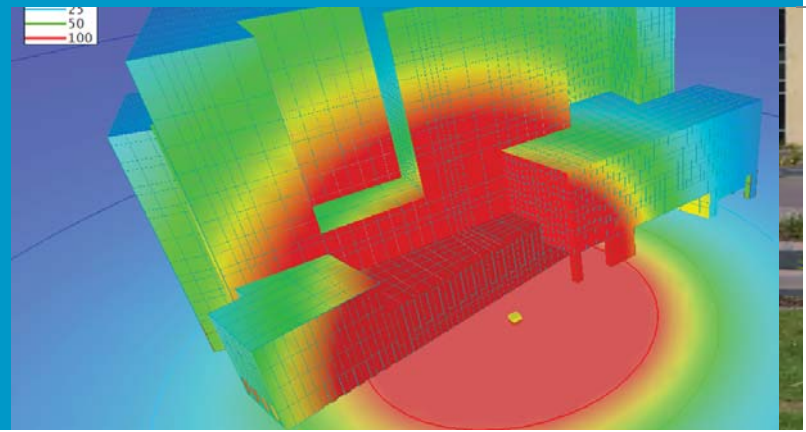
SGW specialise in providing conceptual and detailed design packages for complete turnkey control room fit outs, which not only includes for the display wall and operator consoles, but also includes builders works, MEP fit out and associated essential services. SGW are at the forefront of evolving international standards. Our security control room, alarm receiving centre, urban surveillance and command and control room designs follow guidelines of British & International recognised standards.

### Integrated Security Systems

SGW have significant experience in working with our customers to design and specify a complete Physical Security Information Management (PSIM) system that integrates several non-connected security systems, controlling them via a comprehensive user interface, which enables the user to detect occurring events triggered by different security systems and to resolve them in an optimal way.

Effective PSIM systems with situation management software, to facilitate the detection, handling and reporting of security related incidents often requires a significant amount of scenario planning to be built into a cause and effect matrix, which aligns to the organisation's operational security plans, policies and procedures.

The scenario planning and cause & effect matrix development is often an element of the project which is overlooked, the client expecting to have a bespoke site-specific security management platform operational at handover stage and the installer expecting to train the client how to populate the embedded software, so that they can develop organisational and relative cause and effect operating procedures.



## Consultancy Services

### Hostile Vehicle Mitigation

The concept of hostile vehicle mitigation has been developed iteratively since the Beirut 1983 attack on the US Marines Barracks. Primary Guidance is the CPNI - 'Hostile Vehicle Mitigation Guide' which introduces the primary concepts.

Consideration must be made of the following key objectives:

Slow the attacking vehicles

- Manage speeds
- Control vehicle passage

Stop the attacking vehicles

- Use available Impact test data
- Consider vehicle penetration distance

Maintain suitable stand-off from building

- Consider vehicle final rest position
- Blast protection

To quantify and achieve design certainty SGW have implemented the use of Autodesk Vehicle Tracking Software to carry out swept path analysis of Client's Buildings and Developments. This enables the quantification of achievable speeds and elapsed approach times for vehicles, thus enabling the design of road layouts and bollard and barrier arrays to mitigate and prevent hostile vehicle activities.

Models of an extensive range of different vehicles are included within the software enabling an accurate calculation to be made and modelled. The recent implementation has already justified the cost of the software modelling by reducing risk and client costs on multiple projects where more unfocussed studies had resulted in over-specification of measures and failure to implement the necessary traffic calming measures.



### Explosion Effects Engineering

SGW offer specialist Explosive Effects Engineering services to clients within the built environment. We undertake Threat and Risk Assessments, Threat Identification and Incident Analysis to provide the foundation from which to conduct Explosion Modelling, Blast Load Prediction, and Blast Analysis. Using state-of-the-art software, we can demonstrate how explosive events will impact buildings and other physical assets. Following the analysis, we are ideally placed to provide appropriate risk mitigation options including Blast Resistant solutions, Hostile Vehicle Mitigation (HVM) and Anti-Terrorism Design strategies that gives clients both reassurance and confidence regarding project design and construction.

Typical project work scope for Explosive Effects Engineering Studies includes:

- Review of the existing design information prepared for the site and the outline security requirements specified.
- Blast analyses to understand the blast effects from the Design Basis Threats (DBT), and therefore help provide direction to the preliminary design studies.
- Preliminary design studies to define how the project works could be undertaken to achieve the required blast resistance. For each area of the project, design options are presented to a level of detail sufficient to enable the development of protective hardening cost estimates.





## Project Delivery & Supervision Services

### Project Supervision

SGW understands and values the importance of Project Supervision, ensuring the correct resources are applied ahead of time to support the client throughout the project lifecycle. This culminates in a completed project on time and within budget. Liaison with project specialists, including Architects, MEP designers, Surveyors, Landscape Architects and Traffic Planners, ensures we engage and supervise across all aspects of the project, often working in an advisory as well as a supervisory capacity. SGW, through strong supervision, can support the client in ensuring that the end result meets project specifications and achieves the initial objectives.

### Quality Control and System Witness Testing

SGW is acutely aware of the importance of Quality Control within a project lifecycle. We are committed to ensuring our standards are the highest they can be and have created a Quality Management System that adheres to ISO 9001:2015, BS 8549:2016 - Security Consultancy Code of Practice, and The Association of Security Consultants Code of Practice. This gives us the confidence and ability to guide clients in selecting suitable installers, contractors and manufacturers that best fit the project design. SGW's team conducts System Witness Testing as part of the Quality Control process, producing an audit in relation to the final security installation, ensuring the system meets the original design parameters. We believe it's critical that systems are validated robustly to ensure actual performance meets design specifications, and ultimately that installed systems are fit-for-purpose and reduce risk.

### SECTORS WHERE WE OPERATE



HEALTHCARE



TRANSPORTATION



OFFICE



OTHER BUILDINGS



EDUCATION



DATA CENTERS



MIXED USE



SHOPPING  
CENTER



INDUSTRIAL



# Assessment & Regulatory Compliance Solutions

Our origins and roots, operating in international security and surveillance consultancy means that we regularly face project specific scenarios which result in security challenges which provokes innovative thinking, research and pursuit of solutions which are often unique. As a result, SGW and our partners regularly create new assessment tools for measurement and compliance as international and regulatory security and surveillance standards evolve over time. As such, SGW are committed to making such tool kits and assessment solutions commercially available, to support the international security community.

## Third Party Security Assessment & Certification Schemes

### SABRE Assessment

SABRE (Security Assurance by the Building Research Establishment) - the first of its kind - is a security assessment and certification scheme for buildings and built infrastructure assets, offering users an independently assessed security risk management rating (SABRE Rating).

The scheme recognises and rewards good practice in security risk management during built asset planning and design, construction and operations. SABRE certification evidences that those responsible for security have adopted a systematic and risk-based approach. SABRE has been developed to help responsible persons deliver appropriate and proportionate security, obtain value for money in their investment decisions, improve transparency and communicate their security credentials to interested parties. SABRE is owned by BRE Global Ltd (part of BRE Group), the international provider of robust, independent, third party certification of fire, security and environmental products and services.

SGW have several licenced registered assessors who conduct SABRE assessments on behalf of SGW who are a BRE licenced company, listed in the Red Book. The SABRE scheme requires that certain activities are undertaken by 'competent persons' who have demonstrable experience in a given specialism. SGW also have several individuals in our team who have met BRE's stringent requirements to become licenced SABRE Professionals, to validate their level of experience and demonstrate suitability for performance of such activities.

### BREEAM Security Needs Assessment

BREEAM is the world's leading sustainability assessment method for master planning projects, infrastructure and buildings. BREEAM does this through third party certification of the assessment of an asset's environmental, social and economic sustainability performance, using standards developed by BRE.

The BREEAM third party assessment scheme encourages the planning and implementation of effective measures that provide an appropriate level of security to the building and site, with the award of one credit, with the provision of a Security Needs Assessment (SNA). SGW are suitably qualified to provide a BREEAM security needs assessment which may consider the following:

- Design and layout (e.g. crime prevention through environmental design)
- Physical security (e.g. tested and certified security products)
- Technological security (e.g. Tested and certified alarms, automatic access control systems, CCTV). It may be necessary to also consider building and security systems' ability to resist cyber-related attack. This will be dependent on the types of systems to be incorporated into the project.

The purpose of SGW's security needs assessment is to inform stakeholder decision-making and allow the identification and evaluation of security recommendations and solutions. SGW have previously undertaken many BREEAM security needs assessments in several different market sectors.



## SABRE BENEFITS

SABRE is a way of impartially measuring and evaluating the security of a building or infrastructure facility, against a range of potential threats. It awards an independent security risk management rating - a SABRE Assurance Rating.



## CCTV & Security Assessment Toolkits

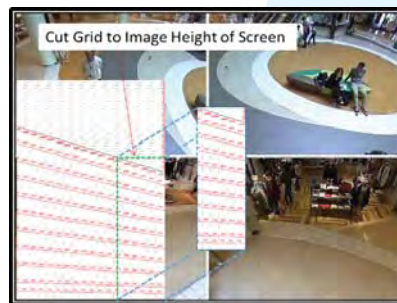
### Video Image Assessment (VIC) Test Target



**Video Image Calculator (VIC)**

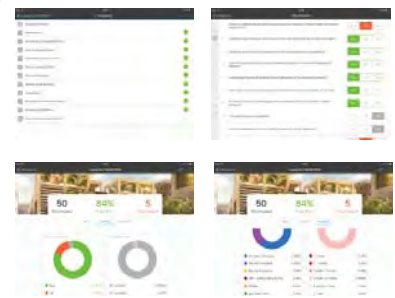
VIC is a 1600 x 400mm CCTV Target aligned with the requirements of IEC 62676-4:2014. This provides a means of quantifying percentage Target Image Height (%TIH) as well as quantifying the discernible pixel density. The target is optimised for use with pixels per metre (ppm) but can be configured to align precisely with pixels per feet (ppf). The target is supplied with additional commissioning and audit aids in soft copy for use when testing camera resolution and focussing - including a handy A3 Field of View Aide Memoire, A4 Resolution Panels, Resolution Cheat Sheet and Excel CCTV Calculator.

### Screen Assessment Matrix (SAM)



In addition to the VIC Target, a Screen Assessment Matrix is provided. This allows users to accurately measure the height of the standard target on the Monitor Display to verify the relevant operational requirement. There is no question of 'it looks about fifty percent' - the matrix allows assessment of TIH with an accuracy in practice to a single digit - thus assessments - 'The target only occupies 47% of screen height' are achievable and repeatable. Training videos are provided for the use of both the VIC Target and SAM Matrix.

### Software Development



To support and assist our consulting team to deliver an efficient and concise service, SGW have developed iPad software to support security surveys and assessments. The toolkit contains both security planning, design and assessment tool kits. The software is an aide memoir for our consulting team to ensure all parts of the toolkit are considered and where necessary applied to a concept and detailed security master plan, for submission to the competent authority.

The software has been used by SGW for completing site surveys in countries including UAE, Qatar, Saudi Arabia, UK, Nigeria and Oman



## Training Programmes

SGW has vast experience of consulting in CCTV, Safety, Security and Counter-terrorism disciplines internationally, in a variety of specialist market sectors. The courses we offer are carefully selected to be within our operational areas of knowledge and expertise, with a real focus to apply the value of 'lessons learned' from previous project scenarios.

### Bespoke Course Design & Delivery

SGW has significant experience in CCTV, security and safety consultancy, and Counter-Terrorism Design services, and as such is ideally positioned to provide carefully-selected and bespoke courses that meet the requirements of security practitioners aiming to expand their own knowledge and training and enhance their capability within a rapidly changing industry. We have successfully delivered courses in the UK and overseas, particularly the Middle East, and we have the capacity to deliver internationally at client request.

### Terrorism and Security Awareness Course - one-day (classroom based)

The threat of terrorism remains an ongoing concern, particularly in open, public spaces, often referred to 'Grey Spaces'. Ensuring personnel have an awareness of Security and Terrorism, and what to do in the event of an incident, is paramount in an ever-changing world where the terrorism threat continues to evolve. 'Hide, Run, Tell' and ACT are publicly-aimed initiatives that provide a strong safety and terrorism awareness foundation. The Terrorism and Security Awareness Course builds on this foundation, using counter-terrorism and security specialists who have a broad range of skills and experience to inform delegates.

Delegates will learn;

- The Terrorist Threat
- Hostile Reconnaissance and how to identify suspicious activity and warning signs
- Terrorism Tactics, Techniques and Procedures (TTPs)
- Personal Security Measures and Preparedness
- Response and Actions in the event of an incident

### Certified Counter Terrorism Practitioner (CCTP)

CCTP is a professional development programme and Certification Level 4- Northern Advisory Council for Further Education (NCFE) accredited) which expands existing knowledge concerning the detection, identification, deterrence and prevention of terrorism-related threats and risks. The CCTP certification assesses and provides formal recognition of achievement through the three-day course culminating in an exam. The Course has been recognised by the University of Portsmouth, Institute of Criminal Justice Studies, to the value of 20 Level 6 credits equating to one undergraduate module.

The Course is formed of 14 modules including;

- Terrorism; An introduction
- Terrorist Organisations; An introduction
- Threat Actors' Motivation, Capability and Intent
- Threat Actor Tactics, Techniques and Procedures (TTPs)
- Device Identification and Analysis
- Attack Planning
- Intelligence and Information Analysis
- Security Concepts; Preventing, Deterring and Detecting Threat Actors
- Incident Management; Crisis Management; Emergency Management





# Training Programmes

## Security Surveying, Assessment & Projects

The course provides delegates with a complete understanding of the process stages and procedures that take a security project from conception to completion. Using previous security project real-life examples and crucial 'lessons learnt', delegates will be able to comprehend and apply 'Best Practice' and 'Best Value' in terms of application and procurement. The Course also provides relevant learning for the PSP ASIS qualification.

The Course is formed of eight modules;

- Assets; Threats; Vulnerabilities, and Risk
- Physical Security Assessment & Security Surveying
- Developing the Operational Requirement
- Systems Design and Development
- Preparing a Successful Tender Package
- Contractor Selection
- Managing a Security Project
- Successful Maintenance Regimes

## Security Threat & Risk Assessment

The Security Threat and Risk Assessment Course allows delegates to gain a full understanding of Threat, Risk and Vulnerability concepts and, more importantly, how it impacts the client, client's assets and business continuity. Too frequently security decisions are made and resources allocated without full understanding of the Threat and Risk profile.

The Course is formed of six modules:

- Introduction to Risk Management Process - ISO 31000
- Threat and Risk; Context, Threat, Risk and Vulnerability distinction and interaction
- Threat Assessment; Capability, Intent & Source
- Risk Assessment; Asset Identification, Risk Context, Likelihood & Impact
- Vulnerability Assessment; Identification and Analysis, Weakness Identification
  - Physical, Technical, Operational failings (Swiss Cheese Model), 'Soft' vs 'Hard' targets, CPTED
  - Practical Applications and Group Exercises; Red vs Blue Team, Devils' Advocacy, Threat Scenario Planning, Integrating Security Solutions and Counter-Measures.

## Video Surveillance Systems Assessment

The VSS course provides delegates with the knowledge and training to conduct an assessment using the Video Image Calculator (VIC) and Screen Assessment Matrix (SAM) - compliant with BS EN 62676. This allows practitioners to effectively evaluate the performance of VSS security systems, highlighting areas of limitation, ensuring the VSS meets the 'Identification, Recognition, Detection and Observe' Operational Requirement.

The Course is formed of six modules:

- Measuring Percentage Screen height
- Measuring Pixel Density
- Consistent Test Regime Practices
- Test Findings and Report writing



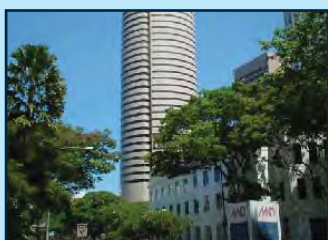
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