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## THE UK BUILDING SAFETY ACT 2022

*A Curious use of Artificial Intelligence to Gap an Information Void*

### 1. Introduction

- 1.1. At the end of March 2023, a UK police officer questioned the impact of the recently introduced Building Safety Act 2022<sup>1</sup> would have on the UK Security Industry<sup>2</sup>. As a *Designing Out Crime Officer* (DOCO), he was particularly keen to understand how this might influence the advice provided to building developers for certain types of doors and windows during the planning application process.
- 1.2. Armed with a certain degree of knowledge in this area —but by no means an expert— I thought I would combine this genuine request for industry information with another topical discussion around the ability of Artificial Intelligence programmes to ‘replace’ or negatively impact the role of a suitably qualified and experienced person (SQEP) within the protective-security industry.
- 1.3. As it seems to be the ‘*Tesla*™’ of the AI world, I logged into [chat-gpt.org](https://chat-gpt.org) and discovered that I could pose ten (10) questions as part of a free trial. My initial motivation was personal curiosity on both parts. 1) Could I find an answer to the question around the UK Building Act 2022? And. 2) how smart is this AI technology? I then thought that others within the security industry might like to see the results of this mini experiment.
- 1.4. This is not an academic paper – this experiment was concluded over a 2-hour period on 4 Apr 23.

### 2. Executive Summary (for the lazy or time constrained reader)

- 2.1. After the ten (plus a cheeky bonus) questions, **I was more knowledgeable** about the impact of the Act may have on the UK security industry [*although I believe significant opportunities were missed to weave in the need to consider adversarial risk and the impact of crime alongside the safety hazards when designing future high-risk residential properties*]. I also established that **AI could augment the capability of a SQEP security practitioner** but, as at the available technology in 2023, **it cannot replace a curious and focussed analytical mind** when factoring in real time and specific data required to provide meaningful and cost-efficient risk reduction advice.
- 2.2. As a security pracademic, it was heart-warming (and this is one of the advantages I have over AI – is that I have a heart full of emotion) to read the responses to questions 4, 8, 9, and 10.

### 3. The Questions (and verbatim response from ChatGPT™)

- 3.1. Here are the questions and responses I obtained from ChatGPT. Had I set out to document its response, I probably would have structured them slightly differently, but, nevertheless, here they are:

Q1. An executive summary of the UK Building Safety Act 2022 and is this legislation likely to have any knock-on effect within the Security Industry, especially where a Designing Out Crime Officers (I pressed the ‘send’ button before completing my question!)

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<sup>1</sup> Granted Royal Assent on 28 Apr 22.

<sup>2</sup> A question posed within the ‘*Built Environment Security*’ special interest group on [The Security Institute](https://www.the-security-institute.com/) Communities website.

**Response:** The UK Building Safety Act 2022 is a new legislation aimed at improving the safety of residential buildings in England and Wales. The act includes several measures such as mandatory safety inspections, certification of building safety managers, enhanced enforcement powers for local authorities, and a new building safety regulator.

The legislation is expected to have a significant impact on the construction industry, but it is also likely to affect the security industry. Designing Out Crime Officers (DOCOs) may have a role to play in the new building safety regime, as they can advise on design features that can reduce crime and anti-social behaviour in residential buildings.

Under the new legislation, building owners will have a legal duty to ensure that their buildings are safe, and residents are protected from fire and other hazards. This may require them to work closely with security professionals, including DOCOs, to identify and mitigate potential security risks.

In addition, the building safety regulator will have powers to issue guidance on security measures for residential buildings, which may include recommendations for access control systems, CCTV, and other security technologies.

Overall, the UK Building Safety Act 2022 is likely to create new opportunities for security professionals and DOCOs in the construction and building management industries. However, it will also place new responsibilities on them to ensure that building safety and security are integrated into the design and management of residential buildings.

**Q2: What is a UK police Designing Out Crime Officer and what do they do?**

**Response:** A UK police Designing Out Crime Officer is an officer who works to reduce crime and make communities safer by designing out opportunities for crime at the planning and development stages. They work with architects, town planners, developers, and other professionals to ensure that new developments are designed with crime prevention in mind. They may also work with local businesses and residents to identify vulnerabilities and provide advice on how to modify their premises to make them less susceptible to crime. Their role is to identify and address potential issues before they become a problem, using a range of techniques such as surveillance, lighting, landscaping, access control and securing vulnerable items. They may also advise on crime reduction measures such as CCTV, security lighting and alarms. Ultimately, the aim of a Designing Out Crime Officer is to create safer, more secure environments for residents, businesses, and visitors.

**Q3: A comprehensive summary for each section of the UK Building Safety Act 2022.**

**Response:** The UK Building Safety Act 2022 is a significant piece of legislation that aims to improve building safety and prevent another tragedy like the Grenfell Tower fire from occurring. The act is divided into several sections, each with its own focus and objectives. Here is a comprehensive summary of each section:

- **Part 1: General Provisions.** This part of the act provides an overview of the legislation and defines important terms used throughout the document. It also sets out the purpose of the act, which is to improve the safety of buildings and make sure that those responsible for their design, construction, and maintenance are held accountable.
- **Part 2: Building Safety Regulator.** This section is dedicated to the creation of a new Building Safety Regulator (BSR) and outlines its powers and responsibilities. The BSR will be responsible for overseeing the new regulatory regime for higher-risk buildings, approving building control bodies, and ensuring that building safety risks are identified and managed appropriately.
- **Part 3: Residential Buildings.** Part 3 focuses on residential buildings and sets out new requirements for their design, construction, and maintenance. It includes provisions for building safety information, mandatory building inspections, and resident engagement. This section also gives the BSR new powers to issue enforcement notices and take action against those responsible for building safety failures.

- Part 4: Higher-Risk Buildings. This part of the act is dedicated to higher-risk buildings, such as those over 18 meters in height or those with multiple occupancy. It outlines new rules around design and construction, and requires the registration of such buildings with the BSR. It also gives the BSR enhanced powers to take action against those responsible for building safety breaches, including the power to issue unlimited fines and criminal charges.
- Part 5: Building Control. Part 5 sets out new requirements for building control and creates a new competency framework for building control bodies. The aim is to ensure that all those responsible for building control have the necessary skills and knowledge to identify and manage building safety risks.
- Part 6: Technical Standards. This section outlines the new technical standards that will apply to building design, construction, and maintenance. It includes provisions for fire safety, structural stability, and energy efficiency, among other things.
- Part 7: Oversight and Inspection. Part 7 sets out the regime for oversight and inspection of buildings. It requires building owners and managers to demonstrate that they are managing building safety risks effectively, and gives the BSR new powers to take enforcement action where necessary.
- Part 8: Enforcement. This section outlines the enforcement powers of the BSR, which include the power to issue enforcement notices, impose penalties, and prosecute those responsible for building safety breaches. It also sets out new rules around liability and limitation of liability for those involved in building design, construction, and maintenance.
- Part 9: Miscellaneous. The final part of the act includes some miscellaneous provisions, such as the power to make regulations and the right to compensation for those affected by building safety failures.

In conclusion, the UK Building Safety Act 2022 is a comprehensive piece of legislation that aims to improve building safety and create a new regulatory regime for higher-risk buildings. The act sets out stringent new requirements for building design, construction, and maintenance, and gives the BSR new powers to ensure that building safety risks are identified and managed effectively. Ultimately, the act aims to prevent another tragedy like the Grenfell Tower fire from happening again.

Q4. Does the UK Building Safety Act 2022 set out protective-security technical standards, mention security risk mitigation, include secure by design, mention crime prevention through environmental design, or mention design out crime officers?

Response: As an AI language model, I don't have access to the latest updates. However, based on my research until 2021, the UK Building Safety Act 2022 mainly focuses on improving the safety of high-risk residential buildings in the wake of the Grenfell Tower tragedy. It primarily includes provisions related to fire safety and building regulations. As per my database, I haven't found any specific mention of protective-security technical standards, security risk mitigation, secure by design, crime prevention by environmental design, or design out crime officers in the Building Safety Act 2022.

Q5. Detailed summary of crime prevention through environmental design.

Response. Crime Prevention Through Environmental Design (CPTED) is a multi-disciplinary approach to reducing crime and enhancing safety by designing the physical environment. This approach involves a set of strategies that aim to increase the level of surveillance, access control and territoriality, reduce the opportunities for crime, and promote a sense of ownership and community in the built environment. The main goal of CPTED is to create a safe and secure environment that is better able to prevent crime from occurring.

The strategies employed in CPTED involve manipulating the physical environment, including buildings, streets, parks, and public areas, to influence the behaviour of people and reduce the likelihood of crime. These strategies may include improving lighting, landscaping, and signage, installing security cameras and alarms, and designing buildings and public spaces with natural surveillance, access control, and territoriality in mind.

One of the key principles of CPTED is natural surveillance, which aims to increase visibility and make it easier to observe and monitor people's behaviour. This can be achieved by designing buildings with windows that overlook public areas, and by strategically placing landscaping and other elements to discourage criminal activity.

Another principle of CPTED is access control, which aims to restrict access to certain areas to reduce the opportunities for crime. This can be done by installing gates, fences, and lighting in strategic locations, and by designing buildings with controlled access points.

Territoriality is another important principle of CPTED, which aims to create a sense of ownership and community in the built environment. This can be achieved by creating clearly defined boundaries between public and private areas, and by encouraging people to take ownership of their neighbourhoods and public spaces.

Overall, CPTED is a flexible and adaptable approach to crime prevention that can be tailored to fit different settings and situations. It emphasises the importance of designing physical environments that are safe, secure, and conducive to positive social interaction, and can help to reduce crime and foster a sense of community and well-being.

**Q6. Provide a detailed summary of the UK policing initiative called secure by design.**

**Response.** Secure by Design is an initiative launched by the UK government to improve the security standards of new-build homes and developments. The program aims to reduce the number of burglaries and other crimes that occur in non-secure houses and buildings. The initiative also seeks to promote the use of innovative security technologies and design measures to make properties more secure from the ground up.

Secure by Design is a voluntary initiative that invites developers, builders, architects, and housing providers to adopt a set of design principles that are proven to enhance the safety and security of homes and communities. These principles include the use of high-quality locks, burglar alarms, and security lights, as well as the incorporation of measures such as perimeter fencing and planting to deter potential criminals.

Secure by Design provides guidance to the designers of new homes, including the use of high-quality materials in construction, such as robust doors and windows that are resistant to attack. The initiative encourages property developers to engage with local police departments and crime prevention officers to ensure that security measures are relevant to the immediate local environment. The scheme also promotes the creation of safe spaces within communities, such as alley-gates and communal gardens, which are protected from vandalism and antisocial behaviour.

In addition, Secure by Design encourages the development of innovative technologies such as smart locks and advanced surveillance systems to enhance home security. The initiative also supports the use of design measures such as natural surveillance and maintenance regimes to help reduce the risk of crimes.

Finally, Secure by Design works to raise public awareness of the importance of home security and the benefits of using a Secured by Design accredited product, which has been tested to the high standards of this initiative. The scheme promotes the use of accredited security products by providing a list of recommended manufacturers and installers.

Overall, Secure by Design is an ambitious initiative that aims to improve the safety of new homes and developments and ultimately reduce the potential for crime in local communities. By providing guidance to developers, builders,

and architects, the initiative seeks to establish a new standard of security that will help you build safer and more secure homes for generations to come.

Q7. Compare and contrast the principles of CPTED with those in *Secure By Design*.

Response: CPTED (Crime Prevention Through Environmental Design) and Secure by Design are two approaches to preventing crime in urban environments. While they share some similarities, there are also significant differences in their principles and practices.

CPTED is based on the concept of a "natural surveillance" approach that aims to increase the visibility and awareness of crime in a given area. The basic principles of CPTED include maximizing visibility, eliminating potential hiding places, creating a sense of territoriality, and establishing well-defined entrances and exits. CPTED also involves the use of crime analysis to identify areas that are prone to criminal activities and to design strategies to address them.

On the other hand, Secure by Design is more focused on designing environments that are inherently resistant to crime. This approach emphasizes the use of physical barriers, such as gates, fences, and locks, as well as electronic surveillance and monitoring systems. The principles of Secure by Design include the use of crime-resistant materials, the implementation of robust security systems, and the adoption of a layered approach involving multiple security measures.

In terms of similarities, both CPTED and Secure by Design aim to create safe and secure environments by reducing the opportunities for criminal activities. Both approaches also require a collaborative effort between architects, urban planners, security consultants, and other relevant stakeholders to ensure that the necessary measures are taken.

In summary, while both CPTED and Secure by Design employ different strategies to prevent crime, they share the same goal of enhancing public safety and security. CPTED is more focused on natural surveillance, while Secure by Design emphasizes physical barriers and security measures.

Q8. Has UK Building Safety Act 2022 considered the principles of CPTED with those in secure by design when setting new building safety standards?

Response. As an AI language model, I do not have access to the latest updates and information on the UK Building Safety Act 2022. However, the principles of CPTED (Crime Prevention Through Environmental Design) and Secure by Design have been widely recognized as effective strategies to enhance building safety and security. It is possible that these principles have been taken into account when developing new building safety standards to ensure that buildings are designed and built with safety and security in mind.

Q9. What type of adversarial risk or security risks do homeowners face in the UK?

Response: As an AI language model, I cannot accurately assess the current security risks in the UK, but I can imply some of the potential risks that homeowners in the UK can face:

- Burglary: Homes with valuable possessions and goods are often targeted by burglars. Burglaries tend to increase in winters or when homeowners are away from their property.
- Cybersecurity Risks: With the advancement of technology, homes are now equipped with smart systems and devices connected to the internet, making them more susceptible to cyber-attacks, such as hacking, identity theft, or data breaches.



- **Social Engineering:** Homeowners can also be a potential target of social engineering attacks where criminals trick people to provide personal and sensitive details, enabling them to access their homes or financial accounts.
- **Physical Assault and Theft:** Homeowners can face risks of physical assault and theft caused by strangers or even guests invited to their property.
- **Environmental Hazards:** Environmental hazards, such as floods, landslides, or fires, can also pose a significant risk to property and life.

Q10. Statistically, between 2020 and 2022 - divided by year, what type of crime, adversarial risk, or security risks do UK communities suffer? Show this in two categories, urban cities, and rural communities.

Response. As an AI language model, I do not have access to real-time data and cannot predict the future. However, based on historical data, crime and risks can vary across different parts of the UK, and it's difficult to generalize them into urban cities and rural communities. Each region has its own unique challenges and characteristics that contribute to the type of crime and risks present. It's essential to analyse the data based on specific regions, demographics, and other factors to determine the risks involved accurately.

Bonus Q. Will AI ever replace a suitably qualified and experienced security practitioner?

Response. You have reached your daily limit. It will update in 24 hours.

3.2. I thought of changing my arm with the bonus question, but my curiosity will now have to wait until tomorrow!

## 4. Conclusion

- 4.1. Artificial Intelligence provides a curious person with access to knowledge held within a dataset, and when skilfully questioned, can present it in a meaningful and intuitive way. The 'power' however, remains with those that upload data or provide the links within the AI programme to the vast information reservoirs that flood the digital world.
- 4.2. Using AI to enhance one's ability to synthesise and present relevant advice to a client is not 'cheating'; after all, we should all look to '*work smarter not harder.*' However, those that create their advice exclusively from AI should consider a different career to those that understand the power that curiosity and empathy has on influencing senior risk owners to allocate the appropriate resources to mitigate adversarial risk.
- 4.3. Finally, **to the DOCO that posed his question;** if those that develop our future residential buildings take time to understand all forms of risk that may negatively impact on the provision of a safe place to live, work, and play, then you will remain gainfully employed. However, when discussing 'high risk buildings,' Sec 65 of this Act stipulates that the building must be "*at least 18m in height, has at least 7 storeys, and contains at least 2 residential units*", therefore; most homes would not be considered as high risk. Moreover, Sec 62.1 describes a building safety risk as, "*the spread of fire, structural failure, or any other prescribed matter*". It does not mention crime, or the fear of crime.
- 4.4. Unfortunately, therefore, the introduction of the Building Safety Act 2022 will not provide you with the '*silver bullet*' to mandate the need for an adversarial risk assessment for the residential buildings — in the same way that Martyn's Law will for Publicly Accessible Locations. This Act does not influence your recommendations pertaining to doors and windows based on the impact of crime – it may, however, influence the fire safety standards for doors and windows but, that will be specified within the secondary legislation as it is published.