

Embedded security

Procuring an effective facility protective security system

Gavin Jones





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1 Introduction

One of the core functions of any facility is to provide security for its occupants and their assets but there remains a significant lack of understanding about how to:

- measure the performance of facilities in terms of the security they provide
- procure effective facility security.

The above issues can lead to investment in unnecessary security controls and undermine the functionality and aesthetic quality of buildings and infrastructure. Of greater concern, is that owners and occupiers who have invested in security may perceive themselves to be secure, while the security controls procured may be ineffective and the consequences of an attack on their facility may be significantly greater than anticipated.

By comparison, over the last 25 years, there has been a dramatic advance in the construction industry's capability in the area of sustainability which has led to, and continues to lead to, better performance, reduced environmental impacts, improved urban environments and reduced operating costs for facility end users. So why the stark difference between security and sustainability, given that in both cases there have been significant drivers for improved performance and advances in technology that can deliver such improvements?

A reason may be that there are two noticeable achievements in the area of sustainability that could explain the successes and should be given consideration in the pursuit of effective security:

- *Research, standards and certification schemes*, such as the Building Research Establishment Environmental Assessment Method (BREEAM)^[1], now provide end users, the construction industry and regulators with a means of measuring the environmental, social and economic performance of buildings and infrastructure. The ability to measure performance allows stakeholders to assess the 'value' of sustainability, build a business case for investment in sustainability and to articulate sustainability aspirations when commissioning new facilities.

Security remains a grudge purchase, which is not surprising given that few end users or project stakeholders understand what 'good' security looks like, how much it costs and what value it adds to a business.

- *Sustainability has been made mainstream.* Sustainability is an integral part of project procurement and everyone across industry now understands that they have a role to play in improving performance. Sustainability is no longer a specialist discipline but a shared responsibility of planners, architects, engineers, contractors, investors and end users.

Security remains the endeavour of specialist consultants, solution providers and installers. These specialists are brought onto project teams relatively late in the project procurement process and usually for limited periods of time.

The above points suggest there is room for improvement and that it might be possible to achieve 'more for less' by:

- defining better what needs to be achieved
- identifying appropriate performance metrics
- evaluating design quality and in-use performance
- making security a shared endeavour.

Without a doubt, there are plenty of facilities that require better security. Faced with a determined attack, many facility protective security systems will not perform as required. Far too often, security controls offer a degree of deterrence but little else.

This is not to say that those charged with securing buildings are not investing sufficiently in security, it is more a case that investment is often mis-spent, with heavy reliance on physical and technical solutions that have not been procured using performance-based design. With poorly defined security objectives for projects, it is no surprise that security is considered late in the procurement process and, as a result, end users often find themselves in buildings that will always be difficult to secure.

When security is considered from the outset of a project, it is often possible to use planning and design to remove security vulnerabilities at little or no additional cost to the project.

Failing to start the process of security risk management at the outset of a project produces inherent vulnerabilities that need to be mitigated at higher cost with applied technical and procedural controls.

Realistically, it will always be a challenge to mainstream security, given the need to protect information about a facility's approach to security, as well as to protect the facility itself. However, it is certainly possible to integrate security into all stages of the project procurement process, promote collaboration between project team members and ensure that employers* are active in security decision making.

* Employer is defined as a person or enterprise/organisation that commissions a project, ie the construction of a facility or alterations to an existing facility; and is responsible for providing the strategic direction to the professional advisers, contractors and supply chain involved in the design, construction and handover of the project.

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Buildings protect what is important to us and, given that there will always be threats to building security, there is a need to deploy appropriate and proportionate protective systems to protect people and assets from losses.

This guide, written for the procurement team, discusses the importance of establishing security objectives at the outset of a new project and the need for close collaboration between project team members and security advisers. It describes:

- facility planning and design of a protective security system
- how to integrate an effective protective security system into the procurement process for new building projects
- key security tasks, information exchanges, and security roles and responsibilities
- the need to protect information relating to buildings and their security, especially as the industry adopts BIM for procurement and asset management efficiencies.

The importance of testing, evaluating and reviewing security system performance to ensure the system remains fit for purpose through the life of the facility is highlighted.



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