

The future for high risk sites:
Is it time for enhanced security and safety
officers?

A G4S white paper

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Preface

This publication represents G4S Secure Solutions' thoughts regarding the future for security and safety solutions on Control of Major Accident Hazards (COMAH) and high risk sites in hazardous industry¹. It seeks to offer analysis and reflections on the unique risk profile in the industry and what key considerations its leaders may wish to examine.

Each of the following pages offers a snapshot of what we believe to be relevant areas for reflection, discussion and debate. Hold in mind that the principles, reflections and analysis will differ according to individual businesses and varied organisations, but we contend that the overriding issues and concepts are applicable across hazardous industry as a whole.

Although this publication attempts to bring together our thoughts on the issues involved, it is by no means our first words on the subject. We have a longstanding and well established dialogue with the industry, welded with insight, expertise and experience.

We are here to generate debate. This is because we believe that meaningful discussion and dialogue on the most appropriate security and safety solutions on COMAH and high risk sites is critical. We also believe that now is the time to have this debate and that the broader it is, the richer it will be. Therefore, please consider sharing this with colleagues and fellow executives.

¹ In the context of this paper, we define 'hazardous industry' as the petro-chemical industry, oil and gas refinery, heavy industry and manufacturing with the use of toxic materials or chemicals. We believe the key principles in this white paper also have highly relevant application for hazardous waste operations, such as shale gas 'fracking' and nuclear power.

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Security and safety: So, what's the difference?

The question of whether the functions of security and safety are separate is somewhat of a red herring. Dictionary definitions define security as 'freedom from danger, risk; safety'. Similarly, safety is defined as 'the state of being safe; freedom from the occurrence or risk of injury, danger, or loss.' So, what's the difference?

There is none. The distinction, we argue, is immaterial. On sites governed by the Control of Major Accident Hazards (COMAH) regulations, the distinction is yet more immaterial.

We offer the view that if safety is the ends, security must therefore be the means.

Major incidents like Buncefield in Hertfordshire, Seveso in Italy, and the Deepwater Horizon oil spill are the stuff of chief executive officers' nightmares. The business fallout of such major accidents can cause financial, reputational, environmental and, most importantly, human damage for years to come. This is why safety is at the forefront of hazardous industry leaders' minds. But we feel that CEOs should also marble security into that fundamental concept of safety. We argue this point on the simple principle that you cannot have one without the other.

The United Kingdom has roughly 950 COMAH sites and countless high risk sites in diverse industry sectors including chemical manufacturing and storage; the refining and storage of oil; the refining and storage of gas; and even the Scotch whisky industry (according to the Department for Business, Innovation and Skills).

Each and every one of the UK's COMAH and high risk sites possesses a unique profile, built up by layers of risk and challenged by a range of threats. The risks are as broad and diverse as the industry itself and can range from human error through to drug and alcohol abuse, from theft to malicious sabotage, or acts of god (in the legal sense) via natural disaster.

Depending on its risk profile, the first thing visitors should see when they enter a COMAH or high risk

site is a security officer of some description. This should be more than just a symbolic totem; it should be an unambiguous statement that from 'first contact' visitors to high risk sites are entering into an environment that is both secure and safe. This first contact should clearly convey that the site is equipped with personnel and procedures to deal with hazards, ensuring that any interaction with the site, internally or externally, is conducted in a manner aligned to the organisation's security and safety strategy.

Given the scope for serious and even fatal business damage arising from major incidents, COMAH and high risk sites demand, and deserve, the best provision of security and safety. However, in this paper we probe whether the current offering requires the seemingly artificial separation between the concepts of security and safety which, as we have established, are essentially one and the same.

That is not to say that security is seeking to replace or otherwise dilute the safety element or indeed vice versa. Instead we believe that each can complement the other and that, as a consequence, security and safety outcomes will be enhanced.

In direct relation to high risk sites, we pose the fundamental question: Has the time now come for fused and enhanced security and safety officers as a nationally recognised standard?

Enhanced guarding: The next step for high risk sites?

Historically, security has been standardised as an offering to business whereby officers guarded people, places and things. Times are changing. Now the direction of travel in the industry is to complement traditional security services with a strong emphasis on safety designed to match the specific on-site demands and strategies of individual customer environments.

While security remains at the heart of the industry's offering to businesses across all sectors, security companies are increasingly 'bundling' additional competencies into their services and the skills of their staff. This has become known as the 'enhanced guarding' concept and model.

Examples of enhanced guarding solutions may include specialist former military Gurkha units with enhanced capabilities in resilience, surveillance and intelligence; close protection officers; specialist canine security; drug and alcohol testing; covert guards; or customised dual roles designed in a bespoke fashion to fit the risk profile of individual businesses.

In the case of high risk sites, CEOs in hazardous industry may wish to examine the enhanced guarding model – as a source of effects-based security - and whether it should be embraced to ensure that the industry is in keeping with changing security and safety models to reap the benefits they can provide. Moreover, they may also wish to consider how the enhanced model can help operators comply with industry regulations in support of their own security and safety strategies.

Given the high risk nature of industrial operations at COMAH and other hazardous sites, enhanced security and safety arrangements are critical in our view. CEOs will quite rightly be mindful of the ever present risk of things going very badly wrong at sites, potentially leading to large scale loss of life and injury from just a single event, including conceivable long-term harm to the environment. They will also be acutely aware of the legal culpability that can arise from incidents, and that

they possess the scope to lead to manslaughter charges and/or fierce financial penalties.

The more hazardous the environment, the more crucial it is for security officers to be seamlessly aligned with company values, procedures and responses. In our view, this is because security breaches elevate risks to safety and that consequently the mitigation of safety risks is to be found within security solutions.

Few businesses have the sheer size to absorb massive financial fallouts from major incidents, for example BP's \$20billion trust fund for the Deepwater Horizon spill, which three years on from the disaster is down to its last \$300million. After all, litigation arising from major incidents is big business and there is no shortage of lawyers in this regard. This threat is compounded by a regulatory architecture that demands operators take all measures to prevent major incidents.² With impending regulatory changes, it will be incumbent on companies to be open and transparent with their processes and procedures to deal with incidents.

In light of the risks facing CEOs, we hold the opinion that traditional standardised security offerings lack the more comprehensive characteristics of the enhanced model necessary to mitigate the risks outlined above.

Hazardous industry has a powerful laser-like focus on health and safety at all high risk sites. However, because we argue that security is intrinsically inseparable from safety - 'as a means to an end' – we believe that the same high-powered focus should also envelope security in an enhanced sense. We are mindful that safety risks are subject to

² For example, Regulation 4 of the Control of Major Accident Hazards Regulations 1999 (COMAH) which requires that: *"Every operator shall take all measures necessary to prevent major accidents and limit their consequences to persons and the environment"*.

rigorous regulatory action, whereas security, although currently regulated, is not subject to the same type of rigor. We offer the view that CEOs should treat security with the same level of diligence as safety because breaches to security lead to heightened risks to safety.

Being culturally vigilant, the hazardous industry sector recognises the need for enhancements and improvements wherever and whenever it can. We contend that the next logical step in the evolutionary cycle of COMAH and high risk sites is the enhancement of security within safety as a fused offering.

In doing so, we see the real benefits of bringing together the disciplines and competencies of the security officer and the safety officer. Consequently, business CEOs with COMAH and high risk sites should also see the benefits of a nationally recognised combined specialist offering in a range of ways, all of which are based on reduced risk and enhanced safety. Although not exhaustively, they are: -

- Reduced risk of fines from the Health and Safety Executive and other legal action.
- Reduced 'time lost' through fewer incidents.
- Enhanced on-site provision of security and safety via an up-skilled workforce, equipped with relevant competencies.
- Overall business efficiencies, coupled with enhancement of service.
- Greater awareness for staff and visitors on security and safety.
- KPI metrics to measure security and safety leading to easier management of resources.
- Overt recognition of the direct link between security and safety, plus the interdependency of the two.

Earlier in this paper, we discussed the security officer as a point of 'first contact' forming a powerful illustration that throughout a high risk site, security and safety are paramount. The benefit of a fused and enhanced officer is not just symbolic, it is very practical.

Recent research shows the power of first impressions is psychologically evidenced and that there may be more than a literal truth to the old

adage 'you never get a second chance to make a first impression'.³ According to the research, new experiences which contradict first impressions are only bound to that specific new experience, whereas first impressions dominate in all other contexts. So, for hazardous sites the first impression, or first contact, is critical because it will shape perceptions, experiences and behaviours. Given the risks involved on sites, we argue that it is desirable for the very first impression to be one of a consummate security and safety regime comprehensively equipped to deal with, prevent and mitigate all hazards.

Readers will no doubt be aware that the demographic profile of the hazardous industry sector is an ageing one and the need for change to tackle this is growing. According to research within the Cogent⁴ sector, the industries which possess the largest proportion of older workers (over 45 years) are chemicals, oil and gas and petroleum⁵. This presents a clear challenge to the industry as increasing numbers of employees enter retirement.

Security officers with enhanced health and safety training - plus first aid and on-site awareness of hazards including how to competently deal with them - can provide an extra layer of vigilance in safety, equipped with the appropriate competencies to identify, escalate and make hazards safe specific to the site's risk profile. This should also include vigilance on drug and alcohol within the workforce as a part of security and safety strategies.

This level of enhancement therefore carries powerful benefits not just in a symbolic sense but practically as well. As the use of enhanced guarding solutions grows, CEOs may want to consider whether now is the time for high risk sites to consider leading this evolutionary change in security.

³ Journal of Experimental Psychology: General, January 2011; Bertram Gawronski, Canada Research Chair in Social Psychology, University of Western Ontario and others.

⁴ Cogent is the Sector Skills Council (SSC) for the Chemicals, Pharmaceuticals, Nuclear, Life Sciences, Petroleum and Polymer Industries.

⁵ Cogent Industry factsheets.

Regulatory architecture: The twin pillars of security and safety

The case for a unified and enhanced approach to security and safety on COMAH and high risk sites is strengthened by the regulatory architecture applied to hazardous industries. Since the 1974 Flixborough explosion in North Lincolnshire, the 1976 Seveso disaster in Italy and more recently Buncefield in 2005, the UK and EU regulatory regime has been gradually built up to control hazardous industrial sites.

In keeping with our overall position in this paper, we offer what we see as the uncontroversial diagnosis that security and safety are the twin pillars of the regulatory architecture of COMAH and high risk sites. In doing so, we believe that this could be reflected in on-site security and safety personnel arrangements.

Hazardous industry is an important part of the British economy and represents an area of growth in an otherwise challenging economic climate. The British Government recognises the importance of the industry, as evidenced by recent financial support guaranteeing UK exports to facilities in Saudi Arabia.⁶ With the Coalition Government's general approach to regulation being slightly more 'trusting' of industry, the hazardous industry has the opportunity to further entrench itself as responsible and self-governing via innovative solutions.

That being said, it is important to appreciate that because of its hazardous nature and strategic economic importance, it is still the focus of considerable regulatory attention.

In the case of COMAH sites, the Seveso Directives, implemented in the UK via the regulations of 1999 and their 2005 amendments, have shaped the way safety on sites is regulated. With Seveso III to come into force in 2015, changes may ripple through hazardous industry and possibly result in changes to the tiers of sites, which could in turn lead to some

sites being included or altogether removed from COMAH regulations.

Thanks to the Seveso regulations and an understanding by the industry that standards need to constantly improve, the focus on ensuring safety at COMAH sites and their operations is becoming an ever larger part of the strategic view of business leaders in this field. Adherence to regulations is woven into CEOs' business plans based on an appreciation that without the pillar of safety their businesses will not survive. Moreover, with greater transparency planned in regulation of high risk sites, CEOs will be ever more keen to ensure plans are both understood and inspire confidence.

Consequently, safety is deeply culturally engrained into the operation of COMAH sites. Safety reports, as required by Seveso, must demonstrate that *all* necessary measures are undertaken for the prevention and mitigation of accidents. Given the presence of hazardous materials on site, security arrangements need to be in place. The Seveso requirement on COMAH sites to provide a Major Accident Prevention Policy (MAPP) obliges companies to set out their emergency planning and monitoring arrangements. Naturally, hazardous materials cannot be safe if they are not secure. We therefore see the twin pillar of safety as security.

Seveso demands on and off site emergency planning with rigorous preparation and testing to prevent the escalation of incidents when they do take place. Some COMAH and high risk sites are near places of significant habitation. Should an incident occur, CEOs will want to make sure that their sites are secure and that hazards are contained, especially when it is near vulnerable homes, schools or agricultural sites. This is a security function as much as it is safety one. After all, a security breach will inevitably lead to an increased safety risk and the regulatory consequences which accompany it.

In the very challenging scenario of a hazardous incident we contend that a combined offering can best deal with it, rendering the incident safe, as well

⁶ Department for Business, Innovation & Skills press release, *Massive boost to British industry in biggest ever petrochemical project*, 21 June 2013.

as ensuring the security integrity of the site by containing incidents where necessary. Of course, these are measures to deal with incidents when they do occur; security and safety measures should be totally focused on prevention. We believe that fusing and enhancing the competencies of security and safety, thus removing artificial distinctions, is the way to do this.

The enhancement of security and safety measures in hazardous industry should be seen as a part of an overall movement towards the growing emphasis on safety in the workplace. With this trajectory already well-established, hazardous industry is well positioned to lead the way on the journey.

We are unconvinced that the current norm in the industry maximises the presence of security officers in this regard. On a standard traditional model on high risk sites, security officers will provide internal and external patrols, control access and egress, conduct identification checks and deal with security incidents.

Yet if they were *enhanced* with site specific substance awareness, plus the on-site triage of identifying, escalating and making incidents safe, their service levels would significantly broaden and lead to overall levels of security and safety being increased. We see this is a move to effects-based security in hazardous industry rather than an approach which treats security solutions simply as a commodity appended to high risk sites.

The demographic drop-off of an ageing workforce should be viewed as an opportunity to fashion change and not simply cope with it.

If CEOs accept our twin pillars observation as offered at the outset of this chapter, they may also wish to seriously re-examine the current utility derived from security officers on COMAH and high risk sites within the overall regulatory architecture we have described.

Conclusion: Is it time?

Hazardous industry is changing. The security industry is too.

Just as any sensible manager would up-grade their machinery and equipment where necessary, so too should they consider up-grading their security and safety personnel to keep up with the pace of change. By definition, this is not about increasing resource (unless there is a genuine reason for doing so); instead it is about doing much better with the resource you already have. We argue that CEOs should view personnel in the same way they view investment in tangible commodities such as machinery, technology, equipment etc. Each has a defined purpose in the context of a high risk site. In our view personnel are no different in this regard.

We have made the case for an enhanced fusion of security and safety officers on a number of bases because we believe that now is the time to consider a step change in security and safety provision.

First, we have offered the opinion that there is no meaningful difference between the two on the basic principle that security is the means to safety as an end.

Secondly, this paper has made the case for our view that enhanced guarding is the direction of travel for security provision. This includes a diagnosis of the benefits to hazardous industry offered by the enhanced model for security solutions. Risks to sites in hazardous industry are multifarious and complex; if security solutions are to be effective, then they should be similarly configured. Just as new models of machines and equipment are adopted by businesses as the pace of change demands, security should also be seen through the prism of continuous product/service development and improvement. We view this need as not least compounded by the enormous risks to business survival that can result from major incidents.

Finally, we made the case for enhanced and fused solutions based around the complex and

demanding regulatory architecture governing high risks sites. In doing so, we have identified the risks which CEOs are constantly vigilant against and we have offered our view on how they might be mitigated, based on our thoughts for the future for security and safety operations in hazardous industry.

Risk is ever present and never static. Major incidents can wound or even kill a company in many different ways. The human cost can be catastrophic. With the direction of travel of regulation, trends in the industry and an economic climate in which the role of hazardous industry cannot be down-played, we believe now is the time to take enhanced security and safety officers seriously.

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During his decade at G4S, Tim has been exposed to a variety of business units and operating environments. Over the past few years, he has worked in the Yorkshire & North East regions which is home to one fifth of the United Kingdom's COMAH sites operate.

G4S partner a number of these sites in their security and safety services and as such, Tim's interaction, knowledge and experience has grown considerably. With a strong background in security and an understanding of the challenges faced by operators of hazardous industrial sites, along with colleagues Tim is well-placed to provide diagnosis on effective security and safety blueprints in the hazardous industrial environment.

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Darren has twenty-two years of experience in the security industry and has helped businesses overcome many security challenges. He has experience of working in many sectors from investment banks to high-end chemical manufacturing.

He has faced many challenges and understands how risk profiles for UK businesses have changed over time. Darren has a strong interest in the relationship between security and safety, and has experience of working with various high risk and COMAH sites in the UK; this provides him with vast amounts of knowledge in the field of hazardous industry security.

To learn more about Safety and Security Officers, please visit our webpage [here](#).