

RESILIENT RAILWAYS

Professor Chris Kemp explains how innovative design and staff development makes railway stations resilient to attack

In today's climate of evolving terrorist attack methodologies, the key to successfully reducing the impact and success rate of the perpetrators is to stay one step ahead of the aggressor. With so many recent attacks focusing on major transport hubs or their environs it seems to be a question of not where, but when the next one will take place. The key to creating a resilient environment is twofold, firstly, to ensure that the latest design innovations related to hostile attack mitigation are in situ and secondly, that the most up to date intelligence relating to socio-psychological elements such as behavioural detection and business continuity methodologies are integrated into all areas where the public interface with transport operations. To accomplish this, a holistic security methodology is required. Such a methodology must; as Pascal Viot from iSSUE states: "Balance anti-terrorism activities with the requisite crowd management/control

BEHAVIOURAL DETECTION TECHNIQUES ARE USED TO INCREASE THE CHANCE OF SPOTTING AN ATTACKER

response". It is clear that when an attack ensues, the balance swings towards hostile mitigation methodologies and away from the management and control of the crowd. These two aspects must be evenly balanced to avert issues further down the line.

In exploring the design and build of a transport hub, a key consideration is to ensure that the mitigation strategies and security infrastructures are built into the design plans from the very start. In this way, when combined with training for the workforce, this holistic methodology covers many of the pertinent aspects related to resilience. There are three important factors in such a methodology, fluid business continuity strategies, evolving physical resource delivery and effective and efficient human resource management.

This article will begin with an insight into the human resource. While working on a recent station development project, it was clear initially that the

planner from the rail company involved had been introduced to the process at a level that was very much above their knowledge and competency. However, there was an obvious plan behind the companies' seemingly dubious reasoning. This carefully planned stroke of genius played a vital part in the development of a resilient planning structure and its following operational implementation. The company had supported the staff member through an educational process alongside their planning work, which had paid dividends in the long run for a number of very important reasons. Firstly, that the person in question had been working for some time at the station, knew the idiosyncrasies, the customer challenges as well as points of crowd confluence, barriers to migration and some of the many and varied issues which were taking place related to ingress, egress and circulation. Secondly, the company hired security and crowd management experts to support the manager, rather than side-lining his ideas as others may have done. In this way, the planning and management phases of both the build and security/crowd management implementation had the benefit of on-the-ground knowledge of the rail environment, innovative crowd management education and training and expert knowledge from the crowd management consultants. To compliment this, the subject in question also provided a knowledge of the community and the city and was able to fold this into the mix providing scientific, mathematical, social and psychological elements that when blended together formed an underlying foundation to the delivery of the security and crowd management strategies of the new build and development.

WORKING PARTNERSHIPS

This story, although not unusual, is not the norm and it is clear from other projects that the delivery of integrated working partnerships across a range of disciplines makes for better security strategies. For too long, those in charge have used a single disciplinary approach not realising until it is too late that an interdisciplinary approach is the way forward as it supports new knowledge from the combination of disciplines and the dialogue between like minds in very different areas. Innovation has always been key to establishing new baselines and changing the approach to planning by ensuring that a fluid delivery of space provides new ways of thinking and operationalising the



A holistic approach is required to stay one step ahead of potential aggressors

plans in context.

With the advent of combined shopping complexes and transport hubs, the aspect of business continuity has never been so sharply brought into focus. If we look back on terrorist targets across the world, we don't have to go far back in history to Paris, Brussels, Mumbai, Madrid and Manchester to see that these are key terrorist targets, as large numbers of people commute through and congregate in them each day. The cycle (the key is in the name) means beginning, middle and end/start again. However, many of those using BCC's tend to forget that the nature of a cycle is continuity. Without the planning and strategic development of sufficient budgets to apply the latest physical and human security measures and utilising these during each of the five phases of crowd flow in the station environment (arrival, ingress, circulation, stasis, egress and departure), then discontinuity will be delivered.

The placement of vehicular and human hostile countermeasures including the institution of the type of materials used to deflect and absorb blasts is important. Combined with this, the careful planning and positioning of gatelines to slow down and make more manageable the transition of passengers into commuters, tourists, shoppers or those using the station for other reasons is key. However, this must be delivered without creating targets by queuing patrons too rigidly

or by creating high-volume congestion areas, which could be counterproductive. Big data is used to ensure that the best possible and most accurate information is acquired for the development and operation of the security measures in such environment. If there is a weakness in the chain then the resilience can be compromised.

GAINING UNDERSTANDING

Of course, the delivery of attendees for one-off events such as football matches or concerts are usually well rehearsed at transport hubs and it is unusual for those planning and delivering the operational activities to be caught out. However, one of the main tools of operational delivery is the relationship and partnership with the main stakeholders. Scientific and mathematical delivery can be useful, but without an insight into the social and psychological mechanisms of your partners and an understanding of the way in which they work, an integrated security delivery will never be achievable. In a transport hub situation where a retail area is involved, all of the tenants and/or concessions must be working to the same plan or during an incident, issues could emerge that could put both the public and the services protecting them at risk. Thus, a holistic methodology is needed, which focuses on bringing stakeholders together to come to

a judgement of a way forward. All parties may have to give a little bit, but the overarching outcome will be greater than the sum of its parts.

In today's evolving security environments, behavioural detection techniques are being taught to railway operatives to increase the possibility of deterring an attacker by an approach, a recognition of different behaviour and also by spotting something that is different from the usual station baseline situation. In many stations, the customer care operatives have already been trained by the incumbent security company and this is paying dividends as it also gives a chance to test the efficacy of the team by auditing their knowledge at a later

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date. The provision of such training has to be scenario based and must be taught in the workplace to increase its effectiveness. A second preventative strategy is to utilise behavioural detection teams. These are more focused on the identification and escalation of issues speedily to remove those acting suspiciously from the suspect list. Although such teams cannot search without invitation and have little power they can work together with other stakeholders such as the police and BTP to escalate. These are just two layers in a many-layered detection and resilience strategy. In such cases the stakeholder interoperability and the communication channels in place must be efficient to deliver a high success rate. Given the terrorist cell operations and the attack methodologies, the chances of infiltrating or getting

intelligence in time to avert an attack are slimmer than ever and thus the deterrent element is extremely important.

DURING AND AFTER

As well as pre-incident deterrents, the during and after attack delivery should be practiced through both live and tabletop activities. One station that we worked at recently, regularly held incident briefings, tabletops and live exercises setting up a morgue, identifying roles and responsibilities so that should an attack or incident occur they were ready to leap into action as this had already been rehearsed.

In conclusion, it is clear that a focus on both physical and human resources is essential in the creation of a holistic methodology, thus, reducing the possibility of an attack and increasing the resilience of transport hubs in a time of uncertainty. It is essential that we learn from others and should be noting and putting all good practice to work in our delivery of the day-to-day running of the transport infrastructure in the UK. Only by building into the station design where possible – and retro fitting where not – the physical hostile mitigation elements, as well as ensuring that staff are well trained at all levels including the application of live and tabletop exercises in situ, can we hope to stay at least even with the aggressor. If not one step ahead of them. Companies need to throw away the box as thinking inside it will not help to combat the present threat. Only through taking new ideas, testing them and then implementing them in our strategies will we make our transport hubs safer and more resilient. Unfortunately, by their very nature, stations have to abide by timetables and this gives the aggressor an advantage as the core business does not change. Thus, our only way of averting incidents is to vary everything that surrounds the framework as this will help to destabilise those wishing to attack us at the very heart of the values we hold so dear ●

Chris Kemp – CEO of Mind Over Matter Consultancy – has worked in the festival and events industry for over three decades with his expertise in the human/dynamics interface making him a much sought after consultant in the event, transport, arena, policing and security sectors.

A policeman examines a suspicious bag in a railway in France



Picture credit: Getty