TALKING POINT

Without better self-regulation, the UK's unexploded bomb detection industry risks losing credibility, says Mike Sainsbury.

With a fatal accident in Austria last year and earlier incidents in other northern European countries, the risk to site investigation and construction works from unexploded bombs (UXB) has been further underlined. In the UK this is relevant as so many heavily bombed areas such as the Thames Gateway, Liverpool and Coventry are now being redeveloped.

But what is the actual risk in the UK? There is a perception that the risk is "talked up" by highlighting European examples and citing rare instances of UXB finds in the UK. The fact is that for some areas of the UK, many UXBs may still be present.

The bomb detection industry as a whole is suffering from a mix of competencies providing inappropriate skills and an inconsistent approach to addressing the risk from UXBs. In fairness, some companies adopt a head-in-the-sand approach, choosing to ignore the issue altogether. With no legislation or other guidance directly relating to UXB risk, this situation is unlikely to change until a serious incident occurs.

But Ciria is in the process of establishing a steering group intended to provide a good practice guide and the primary aim is to provide a consistent approach to addressing risk.

This will help prevent incidents such as recently occurred where a considerable sum of money was spent looking for an abandoned bomb identified in a desk study. The author of the desk study had failed to consult the official list of abandoned UXBs – despite being a UXB expert! In fact the UXB in question had been dealt with in the 1950s and no longer existed.

However, pragmatism is needed in dealing with the issue of risk. An issue has been made in some quarters of the "threat" of non-ferrous UXBs. But the principal airdropped munitions from the Second World War were "iron" (ferrous) bombs containing high-explosive fillings, which should therefore be considered as the primary source of UXB risk.

Smaller non-ferrous bombs were primarily incendiaries (fire causing) and had little ground penetration ability, so are very unlikely to be present today. Although other non-ferrous bombs were dropped (such as doodle-bugs), these are so rare that to address the risk from them would be considered excessive.

Within the UK, overstating the detection range of geophysical technology is fast becoming the industry's Achilles heel. Those offering purely surface-based methods to detect UXBs without due regard to the fact that in the vast majority of cases a bomb can penetrate further than any current surface-based survey method can detect, do so recklessly. The only effective and safe alternatives are the Magcone or drilling based techniques that are routinely used here and in Europe.

Those ignoring site-specific interference effects on the quality of measurable signal and so claiming inflated detection radii for borehole based methods of detection are just as negligent. In either case the value of an ordnance clearance certificate wouldn't be worth the paper it is written on.

The overstatement of detection capability is common because of the inappropriate mixing of skills. It would not be expected for a geophysicist to make safe a UXB, so why should a bomb disposal expert take the role of a geophysicist?

But what can be done if the capability claims of a UXB specialist are doubted? The best approach is to ask the company for real proof of their ability. This requires more than a simple reference to their equipment specifications and a few CVs. If unhappy with the response, ask for proof of capability, either on a site by burying a target, or on one of the specialist test sites in the UK that have ordnance already buried in controlled situations.

Without some self-regulation through consistent good practice guidance, the UXB detection industry risks losing its standing in the UK. Not only is this bad for the UXB sector, but the civil engineering and construction industries may lose a resource that is recognised as one of the best in the world.

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