

Decontamination czar

Robert Bettley-Smith, Director of the UK's Government Decontamination Service, talks to Gwyn Winfield about the new force behind UK decontamination

Robert Bettley-Smith apologises for not seeming more effervescent: “I am excited about this job; what we have done with the Government Decontamination Service (GDS) is phenomenal.” He also worries that, in considering his answers to the questions, some of his enthusiasm might be lost. It would be more surprising if he wasn't, as the GDS has excited CBRN experts throughout the world – especially industry. It is the first attempt to bring in some form of coherence to an otherwise nebulous industry and will shake any of the charlatans out of the CBRN tree, leaving only the professionals.

It is important to work out exactly what the GDS does, and this is neither a decontamination force like the Norwegians have, nor is it a CBRN procurement arm for Her Majesty's Government. The government announced in January 2005 that the system would have three elements: it would “provide advice and guidance to responsible authorities during their contingency planning for CBRN”, “rigorously assess the ability of companies in the private sector to carry out decontamination operations and ensure that the responsible authorities have access to those services if the need arises” and “to advise central government on the national capability for the decontamination of buildings and the environment,” (DEFRA). The first and third roles are, while important, nothing exceptional. They draw together expertise that already existed in government and academia into one place, which is a sensible, but hardly revolutionary, concept. Where GDS suddenly takes wing is in the second – the assessment of capability in the private sector and subsequently facilitating its engagement when necessary. Robert Bettley-Smith went into detail: “We don't do mass decontamination, individual people or animals; we do buildings and open spaces. There are R&D efforts across the board, however, that we are having input into. We looked at the approaches to GDS and concluded that the best scenario was to have a core group of 26 individuals who will have an operational capability, a scientific advisory capability and form relationships with the stakeholders. That means that the decontamination work – the service – will be carried out by contractors under a framework.

“When we looked at it, we looked at all

models: a virtual organisation where people have their day job and just reconfigure in an emergency, or an entire capability like the Australian Incident Response Regiment. We concluded that it was best achieved by having a central core. A good result of this is that there are precedents – one is able to tell ministers that the Maritime and Coastguard Agency have run a similar sort of agency for 19 years!”

Relationship building

The GDS was set up as an executive agency within DEFRA (Department for Environment, Food and Rural Affairs) in October this year, as announced by Parliament in July and have

been exceptionally busy since. They are currently recruiting permanent staff to replace those on secondment, to work in their new Stafford office, and they will have the first framework of contractors available in November, for which they have recently been putting in all the groundwork. “We had the pre-qualification and ITT in August this year, and had a series of interviews and presentations in front of an assessment panel – DSTL, HPA, coastguard, etc. Since then we have been working towards a shortlist. We understand that this is a developing area; we appreciate the level of maturity in the market. That said, we have made it clear that we are looking for medium-term relationships,



The anthrax letters have provided a lot of solid lessons for decon ©CBIRF



Decon systems don't have to be high pressure ©OWR

something lasting several years. We will re-run the tendering process next year for those who've yet to reach the desired capability. We can't have a continual rolling process – this round is closed, but we are considering reopening the same procedure next year, although this is not a 100 per cent guarantee, as circumstances have to be taken into account at the time.”

This is not just a glorified item procurement – HMG is not actively buying anything. This will be a catalogue from which local authorities will choose the right service provider – and this service covers everything, including the people to use it. “We took a strategic decision that we wanted a complete service – people, solution, platform, etc,” said Robert Bettley-Smith. “This is not to say that people who just provide platforms, for example, can't enter – they can, through forming consortiums, an approach we are encouraging. In the future we might want to encourage people to bid with individual components of the service, but not this time round.

“There will be a catalogue that will list the capability available, but the GDS won't insist that local authorities use a specific contractor; we will only offer recommendations. We will make available a list of contractors under a

framework, based on our belief that they can do what they say they can do. We may work eventually – in about five years time – towards some form of accreditation.”

Bizarrely for the military, where standards rule everything, there have been very few standards for CBRN and this has rolled into the civilian sphere. Again, bona fide companies have been calling for more standards, so they can have a tick in the box to attain and feel comfortable with. This may well be something that GDS can work towards, but Bettley-Smith suggested that the market needed to develop before any sensible standards could be set: “The area isn't mature enough for any firm accreditation. We have had trade and scientific practitioners assess whether those that have tendered can enter the framework, but this falls short of a system of standards. There are other standards these companies are already required to meet – health and safety and product standards – so there are underlying standard requirements. We have looked at things like reliability and financial robustness within these bidding companies and whether we believe that they can deliver what they say they can. This may not sound like much, but this is a far better state than we were in previously!”

It is also likely to be a far greater capability

than the local authorities could ever hope to achieve on their own. Robert Bettley-Smith admitted that it would be difficult to give a template for the “typical” GDS scenario. “It depends on the event and the scale of it. The whole reasoning behind the GDS is we are a national resource that can be made available when the local resources are becoming overwhelmed. In the UK we have very good local resilience and this is built into regional resilience, but our core business is when the local resilience is exhausted and can no longer deal with the situation adequately – then we begin to mobilise. The expression I use was: if every local authority had a wheelbarrow wheel it still wouldn't add up to a tractor wheel; we are the equivalent of the tractor wheel. We have economies of scale and the relationship with the contractors, so that before an incident occurs we already have knowledge of capabilities apart from guidance on decontamination. The idea is to enhance this guidance and make it available. We can provide a certain amount of information to local authorities, but our entry point at the moment is at the regional level so we are making contact with the regional resilience forums, so they are aware of what we do. As for how we would operate in practice, you could have two situations where

either the local area is overwhelmed and requires assistance, or nationally there is a view taken that the local authority needs assistance. As we are dealing with competent managers you will probably find that the two messages cross at the same time.”

Decontamination in the civilian market brings to the fore some of the problems that the military have been repressing for some time – how clean is clean, fourth stage decontamination, radiological decon, etc. The military have had a range of different views on fourth stage decontamination, from incineration, through decontamination to... we'll wait and see when it happens. As clear guidance for a civil authority goes this is less than helpful, but it is tied into the fact that the military goal is warfighting and contamination only degrades this capability – it is not a problem in itself. For the local authority the reverse is true; they need to make sure that “Little Johnny” playing in the park doesn't get a dose of anthrax because the ground wasn't properly decontaminated. Robert Bettley-Smith commented that the GDS wasn't there to try and just carry on military doctrine. “I can't comment on military standards and the military approach as I don't deal with that. While what's done in the military can inform what happens in civilian situations, it is not a case of military standard stops at X and then civilian goes to 2X; it doesn't work like that. There are different objectives to be achieved.



The logistics train for decon is getting smaller ©NBCI

“You mentioned how clean is clean. Increasingly there is greater maturity in these areas and things are coming forward. Anthrax is endemic in certain areas of the world but anthrax in buildings is a novel event – as occurred in October 2001 in the US. The standard that was used in the US was nil detectable viable spores. So the definition of clean for anthrax was that, which meant that if you had a situation where anthrax is endemic that would give you a cleaner standard than would have been there originally! Like all of this area, there is work being done and the level of knowledge is pushing forward all the time. It is a newer area of work but there are standards and approaches that can be readily identified that would form part of the protocol.”

The heart of GDS

Anthrax in the US is hardly the best test case, however, as the result was incredibly labour and cash intensive and would not be the sort of response that any local authority could afford. Robert disagreed and suggested that the lessons learned from the anthrax letters made it a very informative test case. “It comes to the very heart of why you need a GDS – so we can link in with what has gone before and produce our own judgements on what is the best way forward. There is only certain information in the public domain, but there were various treatments tried at the start; there is a figure bandied around of 150 different approaches. What you had was a mixture of R&D, then testing it on a building scale, and then doing the job. There was a whole lot of knowledge coming out of that for lessons learned and so on. You did get a certain build up of corporate mythology and faulty reporting – like the postal facility where a judgement after the incident was taken that it should be reconfigured for future operational reasons so the sorting machines were stripped out of the building. That became interpreted as “to decontaminate a postal facility you have to take all the machinery out”, which is not necessarily the case. I have seen demonstrations in the UK using hydrogen peroxide vapour in a pharmaceutical situation where the production line, including the stainless steel, the relays and everything else was left in situ; the covers were left up to let the gasses through, and I have no information to tell me that that customer was not satisfied with the work that was done. If you look at the information flowing from the anthrax incident without interrogating the figures you can draw some horrendous conclusions, but when you analyse the figures and draw on the lessons learned then the

situation becomes manageable, and it was manageable. It was expensive and took a lot of resources but it was managed and because of that experience we have more information which would allow us to tackle it more effectively and efficiently.”

Whatever the problems that are inherent with chemical and biological agents, they pale in comparison with the problems involved with radiological clean up. While they do decay over time, the isotope's life is measured in years rather than hours or days; they also bind onto building material, such as marble and granite and the agent needs to be chemically coaxed out to stop it being a health hazard. It has been suggested that the most likely candidate of a CBRN attack would be a dirty bomb or a radiological dispersal device, which is far more likely to be a threat to property rather than health, and if decontamination could solve this problem then it would pull one of the teeth of the CBRN beast. Robert Bettley-Smith, suggested that the situation wasn't necessarily as bleak as it seemed, “If you look at the Radiological Handbook, it does offer various treatments; it talks about hosing down and scraping topsoil, it is all a question of looking at what is the best application. Certain soils behave differently from other soils, for example, so you have to look at the particular incident. There are fairly conventional methods for removing gross contamination – if you use a road-sweeping machine on surfaces it will take 75 per cent of the radiological deposition off, and the second pass moves it up to 90 per cent. It really is a case of looking at the situation and concluding what is the best technique to use. With any area where there is a demand for knowledge and new techniques there are going to be R&D programmes and there are some very promising technologies, such as nano-tech and things like that, out there.”

Currently it is the catalogue element of GDS that is causing the most excitement, and no doubt the industry bush telegraph will be buzzing with who did and didn't get in. But once the Service is bedded down and starts building on the guidelines that are already available, these will probably become one of the most talked about issues within decontamination. Hopefully these will become the Rosetta Stone of decontamination, taking military and academic learning and being able to fuse it into a more universal language, but as with any doctrine there is no doubt that the first iteration will be slightly flawed and require subsequent refining and improvement before they become definitive. **NBCI**