

Bob Graham, Chair of the US Commission on the Prevention of WMD Proliferation and Terrorism, talks to Gwyn Winfield about the “imminent” risk of a CBRN attack

Wind of change

The CBRN and EOD community is, by and large, a private one. Perhaps because of its classification, or as a result of its unpopularity with the rest of the service/force, it is suspicious of outsiders – yet if it dislikes journalists it usually saves its ire for politicians. Politics and CBRN have not been a good mix. CBRN – or WMD as politicians, and then the media, christened them – were directly implicated in the decision to go to war in Iraq, despite specialists insisting that they were neither as numerous nor as lethal as was made out. Mixing politics in CBRN tends to be seen as a natural disaster – who knows what the end result might be – but that is not to suggest that its appearance must always be negative. Sometimes a structure must be rebuilt to better serve its purpose.

That contention is certainly one of the building blocks for Former Senator Bob Graham, the Chair of the Commission on the Prevention of WMD

Proliferation and Terrorism. The Commission has been in place since 2007 and is tasked with examining the US’s policies and programmes, identifying gaps and recommending ways to close them. This is all at the macro scale, however; the Commission admits that it doesn’t deal with the consequence management part of the problem. Instead, it is tasked with what responders would recognise as the “prevent” part of the picture – actions to be taken to ensure that the attack doesn’t take place. The full text of their latest paper – *World at Risk* – is available here – www.preventwmd.gov – but the following aims to be a quick snapshot:

- Unless the world community takes immediate action, a weapon of mass destruction will be used by terrorists somewhere in the world before 2013
- This WMD attack is more likely to be biological than nuclear
- Nuclear proliferation is increasing rather than receding

- US policy and strategy has not kept pace with the threat
- “Soft” power needs to be used to deal with the extremism that generates the desire to use WMD
- The US needs to secure its own dangerous pathogens; tighten government oversight of BSL3/4 facilities; promote a culture of security awareness in biologists; improve rapid response to bio attacks; outreach internationally to provide assessment of biosecurity risks and strengthen implementation of BWC
- The US must increase penalties for Nuclear non-Proliferation Treaty (NPT) violators; ensure access to nuclear fuel for non-nuclear countries; strengthen the IAEA; orchestrate a consensus that there should be no more new uranium enriching states and change the nuclear relationship with Russia from donor to partner
- Iran and North Korea must permanently cease nuclear efforts
- The US and Pakistan must work towards eliminating terrorism and extremism in areas such as the Federally Administered Tribal Areas
- The US must build a 21st Century national security workforce, especially one that recognises the threats from WMD
- That there must be a strategy to counter the ideology that seeks to develop WMD for use against the US and allies
- The US administration must do more outreach to the common American citizen

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What becomes apparent is the preponderance of nuclear and biological emphasis, though this is less surprising when the Commission and their staff's biographies are examined, revealing a great deal of foreign policy specialists, nuclear non-proliferation experts and a small clutch of bio specialists (with no chemical specialists and only four (out of 37) that could loosely be described as having "responder" backgrounds). When *CBRN^e World* spoke to Senator Graham he was shortly going to testify to the US Armed Services Committee, which had been trailed by the press office as focusing on the nuclear threat.

While there is no doubt that nuclear weapons pose a real threat, and are weapons of mass destruction, there are a lot of measures in place to curtail their use. These span from the NPT and Comprehensive Test Ban Treaty through the International Atomic Energy Agency all the way down to national countermeasures – all the work that the Missile Defense Agency (MDA) does such as Airborne Laser (ABL) and missile interceptors. To ignore the nuclear threat would be a mistake, but does it really require so much tinkering? If it ain't broke don't fix it!

Senator Graham stated that there were solid reasons why he would be focusing on the nuclear side to the Armed Service Commission. "The reason for that is that the Armed Services Commission is the Committee of jurisdiction for most nuclear items, including the ways in which our military handles its nuclear weapons," he said. "The biological side is in committees on the scientific side of the House, and while I am sure in the course of the testimony we will talk about things other than nuclear we were asked to focus on that aspect of our report."

Perhaps the biggest draw of the report – and the one that has generated the most headlines – was its statement that an attack using a weapon of mass destruction (presumably upwards of 5,000 fatalities) is expected in the next five years. WMD is usually a political term, while operators (if they need to think at that grand strategic level), focus on WME – weapons of mass effect (which brings in business disruption). It would

seem a loaded question to ask – not whether there might be a CBRN attack (which is likely) but whether there might be a WMD attack (which, in my opinion, is not), but Bob Graham explained that the choice of "WMD" was just part of the brief. "Our charge was WMD, which we defined as weapons that had a high level of lethality," he said. "We did find it was more likely than not that a WMD would be released somewhere on earth in the next five years, and it was more likely that that weapon would be biological rather than nuclear."

This would again seem to be an enormous claim and, if justified, would mean a huge amount of preparation is needed. Biological weapons have always been fairly easy to make, but it all comes down to lethality – the right agent needs to be released in the right way at the right time. The delivery mechanism for widespread and effective release of biological agents is so complex that it is difficult to see terrorists being able to use them – even for state actors it is a major R&D undertaking, and surely unlikely in the next five years. Bob Graham thinks not, but agrees that dispersal is still a problem. "We reached that conclusion because biological weapons are so ubiquitous – more accessible, less difficult to handle, requiring a lesser level of scientific skill to adapt for a weaponised purpose [than nuclear weapons]," he said. "We think the two things that have retarded the terrorist use of bio are: dissemination – the technology that will predictively disseminate it to a large population; and organisational – if the man who had the anthrax sent through the mail back in October 2001 had been part of a larger organisation rather than a lone wolf then he had the capability to access to lethal materials to kill hundreds of thousands of people."

This is a difficult contention to argue, as it comes down to motive – and we are lacking in any motive for the anthrax letters (if it was Bruce Irvin!). The anthrax letters could have continued to be sent if the killer felt they had not achieved their objective, so it seems (to me at least) that it was more motivational, rather than organisational, aims that kept that incident so localised.

Even if that example is accepted, it would still seem to be a major feat to achieve – to overcome the technical and organisational difficulties in five years. Had the Committee relied on solid intelligence, or was this just a finger in the air? "In a court trial, where you can't definitely ascribe percentages of responsibility or probability, you end up relying on expert testimony," said Bob Graham. "We spoke to more than 250 people in the US, UK and foreign places, and this was our collective judgement of how long it will take for terrorists to acquire access to either nuclear or bio material and to weaponise and disseminate them on a sufficiently broad scale to become a WMD. It was fortuitous that within a few days of our report being released the head of our Intelligence agency, the Director of National Intelligence, Admiral McConnell, released an unclassified report from our intelligence agencies with almost the same predictions and time frame. So we are not out in the woods baying at the moon; we think there is a sound scientific and professional basis to our projections. I hope we are wrong, but I think we should prepare for an immediate threat. Everything we said was prefaced by the phrase 'assuming that conditions continue as we are'. There were a series of recommendations – 13 in all – on what we need to do to change the current circumstance to drive down the probability."

It was not just the technology that the Committee focused on, but also the countries. The greatest threat of one of these devices came from old "axis of evil" faithfuls North Korea and Iran, as well as Pakistan. Iran certainly hits the "sweet spot", in that it is suspected of state research into some CBRN weapons and also of sponsoring terrorist activities. Syria, however, rarely got a mention – only four times, with two of these relating to their links with North Korea (the other two drawing attention to the fact that they are outside the Biological Weapons Convention – with the implicit suggestion that they have hostile intent). So why was there such an emphasis on North Korea, Iran and Pakistan, as opposed to other states that might pose a

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threat and have potential (some of the Ex-Soviet 'Stans for example)? "We think North Korea and Iran are in a class by themselves, and really they are in two classes," said Graham. "At the beginning of this decade North Korea had enough material for two bombs, and now it has enough material for ten bombs. With Iran you have a country that at the beginning of the decade might have been aspiring to – but had no active plans in place for – developing nuclear capacity; today it is probably less than 25 per cent away from having enough material for its first bomb. Two countries – one of which is expanding its existing capability and the other acquiring a nuclear capability."

Yet Syria could be added to that list – a country that would have had a working nuclear reactor if Israel had not acted unilaterally. So was this one of the lessons that was drawn out – that you work with the IAEA when you can, but sometimes swift, unilateral action is the best way forward? "It is the best way forward in part because there hasn't been the authority, capability or confidence in international agencies, including the IAEA, and countries feel they have to do these things on their own," said Graham. "One of our recommendations is that we need to build up the international capability on both the nuclear and biological side by a significant enhancement to the Nuclear Non-proliferation Treaty (NPT) and Biological Convention."

Yet the nuclear threat is not new, in the way that new technology has enlivened the bio threat; it is still laborious to construct a nuclear device from scratch, international treaties and partnerships make it increasingly difficult to acquire fissile material and there still needs to be a transport/delivery mechanism. With so many effective controls in place, how much slack is there in the system? "A number of our recommendations speak to this area," commented Bob Graham. "Where are the areas in the system that create a vulnerability that results in the prospect that, more likely than not, there will be a nuclear weapon used somewhere on earth between now and 2013? We think that the major international treaties are inadequate for current circumstances, and we believe

that in the US there are areas in which we have not brought in adequate safeguards; this is particularly true on the bio side. We see the world entering a nuclear renaissance, as more countries are expanding their capabilities and countries that have never had it before are aspiring to gain it. This is also a possible additional concern: is there material and know-how that terrorists, rogue states and others can use for hostile purposes?"

Much of this is difficult to gainsay; who is going to argue for looser nuclear safeguards? One thing that the committee does make clear is that a lot of these issues have to be resolved in the US before it can pontificate to other states. This becomes very apparent on the biological side: "...countering the threat of BW proliferation and terrorism will require concerted action across a policy continuum that extends from prevention to consequence management. Prevention alone is not sufficient, and a robust system for public health preparedness and response is vital to the nation's security... the dramatic increase in the number of high containment Labs [from 5 in 2001 to 15 in 2012] in the absence of a comprehensive regulatory framework has raised safety, security, and terrorism concerns... As a first step, it is necessary for the United States to put its own house in order and lead the rest of the world by providing the highest standards of biosafety and biosecurity. The US goal must be to keep dual-use materials, technology, and expertise out of the hands of terrorists and proliferators... The Commission believes that safety and security considerations warrant direct federal oversight of all high-containment laboratories. We recommend that the next administration take appropriate action to (1) determine present and future requirements for research on biodefense threats and emerging infectious diseases, and plan future expansion to minimize the associated safety and security risks; (2) require federal registration of all BSL-3 and BSL-4 facilities (whether or not they work with select agents), identify a lead federal agency to oversee and enforce the registration process, and create a government-wide database of all high-

containment labs in the United States; (3) implement a common set of safety and security requirements for all high-containment labs; and (4) mandate standard biosafety and biosecurity training for all personnel who work in high-containment labs, and fund the development of educational materials for that purpose." (World at Risk, pp 23-30)

These are major undertakings; it is going to be a massive task to get the life science and bio industry to comply with these recommendations, and that is if the industry agrees with them. Agreeing with your government is one thing; agreeing with a foreign government is another. Regulation is never welcomed, and the report states it knows that life-sciences try and avoid it wherever possible, but there will be a lot of foreign labs that will refuse to kowtow to Washington – but the threat will remain while labs stay outside these recommendations. Presumably this desire to first set the example is needed to bring the other nations in line. Bob Graham suggested it was not as easy as that. "We think these are parallel, not sequential, tracks," he said. "The US needs to improve its own house so we can represent ourselves as a role model of how other states should deal with the bio side. Secondly, we feel that the BWC needs major reform for greater participation in key countries that are not signed up to the BWC; there needs to be a new approach on how to enforce the BWC that puts more emphasis on holding countries responsible for actions within their own borders. We also think that, unlike nuclear where most people are physicists and have an appreciation of the malicious uses to which their work can be put, there has not been a similar recognition in the life sciences and we think that is an important part of the foundation for strengthening our security against bio weapons." Part of the reason that so many nations have signed up to the Biological Weapons Convention (BWC) is the fact that it is so open and lacking in punitive sanctions. It will be interesting to see how many nations pull out of the BWC if the recommendations of the Committee are enforced.

Another Grand Strategic aim is the desire to deal with the Federally



Will current legislation, and the threat of force for non-compliance, continue to be a brake on this 'nuclear renaissance?'
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Administered Tribal Area (FATA) in Pakistan. The US is not the only one to have this aim; Pakistan would also like further control of FATA, as the British Empire did before it. Pakistan and the US have had a somewhat rocky relationship of late, and Pakistan cannot have been pleased to see how much they, and their people, figure in the World at Risk report – a case of more intervention rather than less. The aim of the intervention is to win the hearts and minds of the population of FATA to ensure it does not become a breeding ground of terrorism and a factory for CBRN devices. This is not only a huge task in itself, but also demands major changes in US foreign policy – Predator strikes in North West Frontier Province, etc – which is the major source of extremism directed at US forces and homeland. Bob Graham admitted that it was a big goal. “It is – particularly the issue of extremism, he said. “We feel the US effort on counter terrorism is largely dealing with the results of terrorism rather than the causes, and our purpose was to sound the alarm and start a parallel effort on the causes as well as the results. It will be extremely difficult, and there are few successful examples of trying this kind of reform on the scale necessary, but the consequences of not trying and of trying and not being successful are so incredibly unacceptable that we think the effort needs to be

mounted. I was pleased with the testimony from Senator Clinton, where she gave a great deal of attention to exactly this issue; it is an encouraging sign that others share our belief and want to turn belief into action.”

History is littered with hearts and minds campaigns that have failed (Iraq, Afghanistan, Algeria, Indo China/ Vietnam, Somalia etc), and very few that have succeeded (Malaya), so that would seem to be a long term aspiration rather than a concrete goal. A lot of the report is aspirational; there are action points, destinations, but no clear guidelines on how to get there. To a certain extent that is to be expected – this is Grand Strategy – but on occasion the report does seem to be overly optimistic in the scale of change; a case of “big hands, small map”. The Committee is in a hurry; with a new administration facing the worst economic climate of the past 70 years this is not surprising – if things are not seen to be urgent they will get lost forever. It is this need for urgency that strikes me as the false note out of the whole report – the situation is not as bad as the report makes out. Certainly in my experience first responders, military practitioners and CBRN scientists tend to be robust about the threat; there are very few doomsday weapons of mass destruction scenarios out there, and that risk can be balanced but not ignored. Senator Graham suggested I was in the

minority. “I don’t know who you have been talking to; we spent considerable time in London talking to law enforcement, military and political and scientific representatives and that was not the conclusion that we came away with,” he said. “This is a serious problem that is getting worse; there are some things we can do but not much time in which to do them.”

Despite the carping, it is a good report; the recommendations that have been suggested are sound and would lead to a safer world. Whether they are achievable is another thing but, politically, it is better to set high sites and fail to reach them than have lower sites that don’t address the problem. The Henny-Penny “sky is falling on our heads” attitude is politically useful too; it is the start of a new administration, there is a recession the likes of which few of us have seen before and there is a threat out there. Currently, however, the world is at risk from unemployment and civil unrest and these will be the biggest challenge for most of the population and first responders, rather than CBRN, and no matter how loud the call it will get drowned by that tumult. Hopefully, some of the recommendations that the Committee has made that require changes to organisation and focus, rather than significant budget increases, can be picked up and actioned.

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