

# The nexus grows

*CBRNe World* reviews the latest in the Sispat series of conferences

Most foreign visitors have to travel a long way to get to Sispat. While there may well be pockets of excellence in Thailand and Malaysia, there are not a lot of CBRN-competent close neighbours, so for many people Singapore might seem to be just that bit too far. Those who take the study of CBRN protected states seriously, however, know that Singapore is well worth the effort – and so Sispat proved again.

Sispat has been growing steadily; it lacks the close, CBRN competent neighbours of Gothenburg or Tampere and the enormous home-grown market of the US, but it is moving up the rankings of CBRN conferences steadily. The last event improved on its attraction immeasurably by adding the first ICOC to the billing too. ICOC is the Users Yin to the Scientists Yang, offering a wide variety of user experience to a completely different audience. Many scientific CBRN conferences are not inundated with the user community – Gothenburg being the exception that proves the rule – as the papers are often set at a level far higher than they find useful. Often slides are impenetrable to the non-scientific and are delivered to a peer group with little explanation for those who cannot keep up.

This has encouraged a bipolar development, with scientific conferences on one hand, and user conferences on the other, with never the twain meeting. This has often been a disappointment as, with a little bit more care for the users, scientists would often find more vocal support for their research. By running ICOC and SISPAT together, the organisers were encouraging a degree of cross pollination – which I

think worked well. Registration to the event allowed you entrance to both events, so a paper that was either out of your field, or already well understood could be exchanged for something wildly different – a threat-based one for the scientists or a science paper for the users.

While the events overlapped they were not entirely synchronous, with ICOC being a day and a half shorter than SISPAT which did mean, when the diversity was taken away, that the event lost a little of its sparkle. As is often the case with conferences many of the best speakers were placed at the start of the conference, meaning that the first day much resembled a new box of chocolates, with serious concerns over whether you could afford to miss one speaker to choose another. This was not to suggest that the last day represented the remnants (more the chocolates that you didn't know you'd like), as the final session on Protection was, for me, one of the best of the conference with some major thought provoking papers.

The delegates were also very well looked after, with a range of social events during the evenings and a dedication to show the best of Singapore's cuisine. One of the highlights of the event for the delegates was the practical demonstration given by the Singapore Army and the Australian

Incident Response Regiment. This was the full gamut of CBRE capability (thankfully we were spared the nuclear flash!) with upwards of 50 participants. Showing detection, SIBCRA, medical countermeasures, IED disposal, triage and decontamination, the delegates were provided with an excellent grasp of the level of Singapore and Australia's capability. Despite the high temperature and rich humidity, bomb techs went through a range of exercises in full IPE and showed a high degree of professionalism and stamina.

Highlights of the SISPAT conference include the agent fate session. This was a first rate piece of collaborative research split mainly between the US, UK, Netherlands and Czech Republic. Agent fate is core to



ICOC: Bringing new life into the CBRN conference circuit ©CBRNe World

all understanding, and therefore responding to, a CBRN incident, yet is often based on either historical information or Hazmat experience. One of the most worrying slides in the whole conference came from James Savage at ECBC who showed how the various field manuals disagreed with each other and how far they all were from reality. Wai Leng Loh, of DSO National Laboratories in Singapore, also gave a fascinating presentation on the agent fate of toxins and micro organisms on a variety of surfaces. Usually, agent fate is most concerned with chemical fate, so one on three toxins – ricin, T2 and SEB – and three micro organisms – *B. subtilis*, *Y pestis* Kim 5 and *S. aureus* – was a welcome change. As might be expected, the results varied depending on what agent was used on what substance, but she concluded that SEB and Ricin were more persistent on parquet than carpet and that spores were the most stable of the micro organisms, for example.

Despite giving two papers, due to the illness of a colleague, Eugene Wilusz gave two different, but equally interesting, presentations on the developments in the US on next-generation clothing and the work that is being done on novel materials. In the previous edition of CBRNe World, Doug Bryce offered the suggestion that the US would be able to provide JSLIST levels of protection at combat clothing levels of physiological burden, and Professor Wilusz went into some detail of how this holy grail might be achieved through the use of ion implanted membranes and layers of controlled pore size membranes – he also intimated that we might see in the near future a membrane that can open and close itself in response to stimuli. Jan Medema's presentation on the work that he has done on the bellows effect of impermeable clothing was also highly instructive. His research suggested that impermeable suits, though not the full SCBA kind, could offer lower levels of protection than normal

clothing – at rest for example when the bellows effect would be suspended and the agent would be able to pass through the impermeable layer.

Notable mention for "Paper Completely Impenetrable to a Non-Scientist" must go to Jean- Pierre Issartel from CEB in France who gave a paper marinated in mathematical equations on monitoring the contamination of a set of buildings. This innocuous sounding paper was the fiercest intellectual challenge and was an example of why layman and scientists rarely mix.

ICOC gave a far broader range of papers, covering a wide variety of threats and geographic locations. Probably the best paper for openness and accessibility was Inspector John Bureaux from the Royal Canadian Mounted Police. While many countries and speakers are often reticent about sharing information and the information delivered is bland, Inspector Bureaux's presentation gave an enormous insight into the problems that Canada is facing and the MO of a number of extremely unpleasant organisations and individuals. Despite the distance, Sispat is very much an Australian show and they were the largest national contingent after the Singaporeans. ICOC was an extremely useful time for Europeans and Americans to get a better appreciation of the work that is being done down under. As a teaser of the demonstration that the IRR gave on Wednesday, the CO, Lt. Col. Stephen Alexander (for more information see page 52) gave an insight into the work of this elite CBRN regiment. While it is probably extremely well known among other Special Forces units, for many of the delegates it was a chance to learn more about this highly competent force. Of equal importance was the chance to learn more about the host nation. DSO was able to provide a great deal of insight through Sispat, the SAF were able to provide the delegates with a fantastic

amount of detail through the presentation of Colonel Ho Kong Wai and Major General Desmond Kuek. Singapore is justifiably well known as a paragon of CBRN defence for two forces – the SAF and SCDF. While the SCDF kept a low profile at the event, the same could not be said of the SAF and their reputation was enhanced because of it.

If there must be a sour note on the event it was on the facilities for the exhibitors. The Raffles Plaza, while an excellent conference venue, does not lend itself well to exhibitions and stands were often tucked around corners and there was no obvious flow of delegates through the area, instead milling around the coffee stations far from the plaintive exhibitors. While many felt they could have done with seeing more people, the quality of the delegates was very high – the distance alone acting as a natural deterrent to the casual browser. It was also disappointing that there wasn't a higher proportion of Singaporean civil responders. Clearly this is Singapore's military show, and while there were a lot of civil responders there they are not native to Singapore's shores. Singapore's response to any CBRNE event will be multi-agency and it would be nice to see SISPAT/ICOC reflect this.

The next event is scheduled for 2008, and with attendance growing at CBRN events throughout the world it is likely that the forthcoming conference will have expanded on its 400 delegates. DSO, SAF and the organisers put a lot of effort into the symposium to make sure it was a success, and it will be a hard act to follow in 18 months' time. While there are many conferences and events in the CBRN calendar this is one that deserves to be patronised more. As anyone who has read my articles over the past five years can testify I am a fan of the CBRN capability that Singapore has built and Sispat is probably the best place to come and learn how they did it.