

2016 sees Antycip Simulation celebrate its 20th anniversary. A subsidiary of ST Electronics Training & Simulation Systems, the company specialises in the provision of professional-grade COTS simulation software, display systems and related engineering services. Trevor Nash talks to **Chris Waldron**, UK area sales manager, about S&T market trends.



Solution central

With its current list of 23 partners including AGI, Barco, Christie Digital and Scalable Networks, Antycip Simulation focuses on providing products and integrated training solutions and services.

Although a relatively small company, albeit with offices in France, Italy and the UK, Antycip has the ability to draw upon the resources of its partner companies as and when required. Melding its capabilities with those of its partners gives the company a degree of flexibility and agility that is often lacking in larger, more homogenous corporations.

'Our business model certainly gives us some advantages, but like all companies in this sector, we are subject to the vagaries of budget and procurement processes,' said Waldron. 'I would view the current market as mixed, although there are some high points.'

Over recent months, these have included contracts with Airbus and BAE Systems, but looking to the future, Waldron said that 'momentum seems to be gathering for a focus on air force training to rebalance the emphasis on training for ground operations in Afghanistan'.

It is quite clear that simulation technologies can help to provide much improved training and this also has implications for mission rehearsal, an area that Waldon believes, 'is yet to be fully exploited'.

In terms of these technologies, especially image generation, Waldron said that 'visual fidelity is, quite frankly, outstanding', and this is leading more to the question of whether virtual training can undertake increasing

aspects currently being conducted in the live domain.

'The traditional view was that virtual training was never as good as live, but the fidelity provided by virtual simulation, especially in terms of sensors, platform dynamics, physics and artificial intelligence-driven tactical scenarios has never been better.'

Virtual immersion

That is not to say that virtual training is the answer to everything and Waldron emphasised that live training still had a massive role to play. 'Of course live training is important, but using virtual training systems before undertaking live training can better prepare the armed forces. Live training – or for that matter real operations – are very expensive, and correct virtual immersion prior to the live event can increase operational effectiveness and save money.'

The idea of injecting virtual training into live systems is also an area that Antycip Simulation is pursuing. 'We believe that this approach can add more realism and reduce costs,' explained Waldron. 'By adding elements such as synthetic targets, pattern of life, communications and sensor feeds, real systems can be used for synthetic training.'

Waldron believes that the world's armed forces are looking to carry out 'better training for less money'. However, there has been little operational analysis undertaken on virtual simulators to determine their precise value or training benefit. This lack of evaluation and validation data 'is surprising and needs to be addressed', he added.

'We need to ask the correct questions of our simulators so that they can provide the optimum training benefit, because at the moment there seems to be a disconnect between requirements and how such systems are procured,' added Waldron. 'Specifications and requirements need to be clearer and contingency funding retained throughout the project to ensure that the end-user gets what they actually need. Requirements evolve quickly so the simulators must be able to do the same.'

'There is certainly a wide choice of solutions available,' he argued, 'but this is not always a benefit. Often, this choice overloads the procurement process and can lead to confusion.'

Asked how this confusion can be reduced, Waldron said that one of the key issues across the globe is how the procurement of simulation systems is undertaken. He said that 'there is a major issue with stovepiping' and a lack of real technical knowledge of what is available.

A solution, he suggested, was 'to invest in a common simulation backbone or a common architecture' and have one overarching simulation and training centre of excellence portal for each national defence force.

To be successful, armed forces need to invest in training. 'There are potentially huge advantages and significant cost savings to be gleamed from a successfully implemented live-synthetic balance, but there is no such thing as a free lunch – an initial investment has to be committed in order to reap the rewards,' concluded Waldron. ■