

Leaders discuss collaboration of modelling and simulation - ACT

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During ITEC 2011 in Cologne, Germany, Petty Officer Burdt from ACT Public Affairs met with representatives from ACT, United States Joint Forces Command, and the Modelling and Simulation Centre of Excellence (M&S COE).

She met with them to discuss how the three entities are working together to enhance modelling and simulation capabilities. ACT Modelling and Simulation Analyst, Wayne Buck; Executive Director of USJFCOM J7, Greg Knapp; and Modelling and Simulation COE Director, Colonel Francesco Mastrorosa explain their individual roles in this collective effort.

What is the history of ACT's involvement with COEs?

Buck: During the 2002 NATO Summit in Prague, the nations gave instructions to the NATO Command Structure to downsize. During that downsize we lost many of our niche capabilities. A transformational element was established and an operations element was established. As the transformational element, ACT was given the guidance to "do what you need to do to improve these capabilities." The solution that ACT came up with was Centres of Excellence, which the nations were asking to provide in order to reinvigorate these niche capabilities.

ACT currently has 19 COEs that are spread throughout the nations. Italy started speaking with NATO three years ago about establishing a COE for modelling and simulation. It is a different specialty, modelling and simulation, because we already have NATO modelling and simulation capabilities through the NATO Modelling and Simulation Group, NATO Consultation, Command and Control Agency (NC3A) and nations. We at ACT saw room for Italy to provide that and we have been helping to support.

What steps have Italy made in preparing the COE?

Mastrorosa : Italy offered this capability to NATO because we already have experience with modelling and simulation through our national centres. The facility is ready to operate with ACT. As a framework nation, I can say that Italy has made a huge investment of five million Euros just to prepare the facility for operations.

The peculiarity of the centre is that we are dealing with not only nations and NATO headquarters but also industry and academia. The relationship among these groups was established through a Memorandum of Understanding (MOU) and technical agreements with different NATO entities.

Once the COE is established, will it fall under the ACT command structure?

Buck: The centre won't fall under the NATO Command Structure or ACT. When it has been certified and accredited by ACT, we recommend to the North Atlantic Council that they make the centre its own international military organisation. Although the centre doesn't formally exist, they are already moving forward. They ran their first computer assisted exercise (CAX) April 2011 and will be hosting the CAX Forum in September.

What is U.S. JFCOM's role in Modelling and Simulation?

Knapp: One of our primary relationships, other than with the U.S., is with ACT. We are partners in many things with ACT. Around 2003 we took a national commitment to make distributed training based on simulation of live, virtual, constructive environment a national priority training strategy. Since then, we have built out a national training infrastructure and that is how we support hundreds of training events a year with a distributed national training environment. In the past three years we have started working with our coalition partners to facilitate and coordinate on extending this distributed training idea to NATO, Australia, Canada and the United Kingdom and the rest of our global partners.

It saves money because people don't have to travel as much and it clearly provides a different level of fidelity or realism of training. We believe in simulation and distribution. ACT began talking to us about the Italian M&S COE and we started to see an opportunity that we can share what we learned with Italy and have them become a facilitator for NATO to help extend these philosophies through our nations and partners. We have had numerous meetings and are looking at the types of technology we can share in simulation. The objective would ultimately be for the U.S. to work closely with Italy to give and receive knowledge on the application of M&S.

As we work with the Italians, we will share lessons learned and in turn they will be able to make decisions from their perspective on the best things to do to support the war fighter.

My personal hopes would be that Italy would be in a principle position to be the qualifier of simulations as they are applied to NATO. Wherever it makes sense, the U.S. would contribute concepts, simulations, philosophies, techniques and standards – all the types of things that enable Italy contribute more to the Alliance. What we would get back from them is that they would learn and grow as a centre of excellence. This is a long-term relationship of planning, cooperation, engineering and employment of capabilities that I think brings NATO and USJFCOM together quickly and more deeply.

How does the relationship between ACT, USJFCOM and M&S COE provide the greatest benefit to the nations?

Knapp: This is very much about efficiency and cooperation so that when we source to industry we are buying what we need. Without such kind of collaboration and coordination at this level that we are talking about with the COE, we don't have the chance to buy the right kind of products. It is also important that we as nations interoperate and not buy products independently because we could all buy the same thing twice and actually get two different versions of the same thing that are unable to operate together.

It is better to know what we have bought and share the technology that we own and understand each other as we depart from the baseline. When we jointly contract, we can ensure our own interoperability to the greater good - this is the essence of our relationship.

Besides ACT and the nations, who else will provide input and guidance to the COE?

Buck: Each COE is allowed to come up with their own business plan and ideas. The M&S COE is the only one that has a government, industry, academia and business model that permeates throughout. There are positions for academia to be there; there are positions for industry to be there. In modelling and simulation that relationship is vital.