

**European working group 3<sup>rd</sup> European symposium on Non-Lethal Weapons**

**Evolution of X-Net™ to TruX-Net: A Heavy vehicle arresting system.**

**Abstract:**

**Author:** Chris Lyddon - QinetiQ vehicle systems, Cody Technology Park, Farnborough, UK

**Keywords:** Non lethal, Vehicle Arrest, TruX-Net, X-Net, Counter Mobility

**Background**

In the growing global terrorist theatre, the requirement for safely stopping vehicles has become a top mission priority. The QinetiQ developed X-Net™ vehicle arresting system now has proven success in both Police and Military peace keeping operations. Over 1000 units have been supplied to global peacekeeping forces including UK MOD, US Army & US Marine Corps providing a unique counter mobility and force protection capability.

The X-Net is believed to be the only non-lethal vehicle arresting system that is lightweight, rapidly deployed and can fully arrest a vehicle in minimal distance, not just puncture tyres. However, large vehicles are still a challenge and further development is required to create a heavy vehicle arresting solution.

**Research objectives**

By exploiting growth potential in the existing commercial X-Net™ medium vehicle arresting system, a heavy vehicle arresting capability 'TruX-Net' is to be created by:

- Development of new spike designs and net concepts;
- Advancing the material properties to increase the load capacity and wear resistance of the system with optimal spike retention;
- Test and evaluate the material properties using semi-empirical and physical validation techniques;
- Evaluation of results and presentation of results;
- Deliver working prototype systems.

