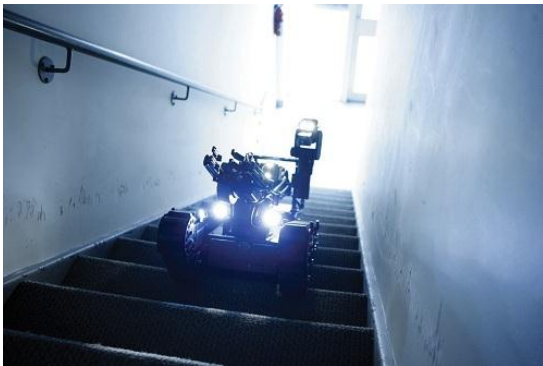




## World's first Wireless Underground Robots for First Responders (WURFR).

***(Livingston, UK and Tewkesbury, UK, 31 January 2012) WFS Defense, leading supplier of through-water and through-ground wireless technology for communication, navigation and power transfer, will collaborate with Allen-Vanguard, trusted global leader in providing solutions for defeating terrorist/extremist threats, to develop and demonstrate the world's first Wireless Underground Robots for First Responders (WURFR) robotic vehicle.***



From surveillance, to suspicious material identification, to detection of hazardous gases, robots can gain situational awareness in inaccessible locations or where it is not safe for humans to go. These robots can be remotely operated, and sent in advance to a dangerous or unknown environment to significantly reduce risk for a human first responder team.

First on the scene after an emergency call such as for a bomb explosion, terrorist attack or fire, robots are often critical in this situation, but First Responders are currently unable to communicate reliably with robots operating underground, in collapsed structures, and similar situations. Today's vehicles operate with tethers or 'breadcrumb' repeaters (small transmission devices deployed like breadcrumbs) which can limit usability in an emergency situation.

This is the first attempt to fully integrate WFS wireless technology into a commercial robotic platform and will demonstrate a robot operating underground. The wireless technology will enable the development of robots that can then be used in tunnels, collapsed buildings, sewerage networks and in shallow water - anywhere it might be unsafe for a human to go.



The robot will use WFS' wireless modems to provide 2-way communications, networking and location capabilities through-ground and through-water and will enable the robot to stream video, collect sensor data and act as a repeater for underground voice communications. With wireless communications and location/tracking capabilities, First Responders are able to deploy robots for search and rescue activities more widely, more rapidly and more safely. The WURFR system will;

- Improve safety for First Responder teams
- Reduce costs of inspecting and clearing emergency locations
- No tether, increased flexibility of deployment

The WURFR system is expected to become a core element of the First Responder's toolkit, improving public safety and efficiency during incidents.

END



## Notes for Editors

### About WFS Defense

WFS Defense is the world's leading supplier of through-water and through-ground wireless technology for communication, navigation and power transfer. Utilizing radio, acoustic and inductive power transfer technologies, our field proven expertise in wireless connectivity is delivering cost savings and new capabilities to the Homeland Security and Defense industries. For a full specification of WFS wireless products visit: [www.wfsdefense.com](http://www.wfsdefense.com) or email [info@wfs-tech.com](mailto:info@wfs-tech.com).

### About Allen-Vanguard

Allen-Vanguard is a trusted global leader in providing solutions for defeating terrorist and extremist threats. With an unrivaled expertise in counter-threat solutions, systems, and technologies, we deliver battle-proven equipment for defeating IEDs and other terrorist incidents at the technical, operational, and national policy levels. For more information please visit [www.allenvanguard.com](http://www.allenvanguard.com), or contact Kate Jacobs +44 (0)1793 786354 or [kate.jacobs@allenvanguard.com](mailto:kate.jacobs@allenvanguard.com)

### About the UK Technology Strategy Board

The UK Technology Strategy Board is a business-led government body which works to create economic growth by ensuring that the UK is a global leader in innovation. Sponsored by the UK government's Department for Business, Innovation and Skills (BIS), the Technology Strategy Board brings together business, research and the public sector, supporting and accelerating the development of innovative products and services to meet market needs, tackle major societal challenges and help build the future economy. For more information please visit [www.innovateuk.org](http://www.innovateuk.org)