

FOR IMMEDIATE RELEASE

WFS Defense and Partners deliver first radio-enabled UGV for through-ground C4ISR

(Washington DC, USA and Livingston, Scotland, August 13, 2010) WFS Defense Inc, world leader in commercial application of through-ground and through-water wireless radio frequency (RF) technology, confirms successful field trials of an unmanned robotic vehicle for through-ground C⁴ISR.

WFS's Terratext® and Terratooth® wireless radio systems were integrated into an iRobot® Negotiator® to provide communication, location, docking and wireless power transfer functions. Successful integration included the demonstration of:

- **Real-time command and control of a robot through the ground** enabling remote deployment of robots in emergency situations for location of people trapped in caves, tunnels, culverts and collapsed buildings and also to support mapping, maintenance and repair of underground sewers, waterways and pipes.
- **Video streaming through the ground** to support operations where visual assessments are required, but human life cannot be risked (e.g. Search & Rescue)
- **Location of an underground vehicle from the surface** to pinpoint exact sites in tracking, search and rescue or reconnaissance missions
- **Homing of the vehicle to a docking station** to recharge or transmit information without returning to the surface
- **Wireless power transfer to recharge** the vehicle at a docking station to enable deployment for longer missions



Under joint funding from SEAS DTC and Invest Northern Ireland, part funded by the European Regional Development Fund, (ERDF), WFS partnered with iRobot and the University of Ulster to demonstrate the benefits that WFS' radio technology can bring to unmanned robotic vehicles.

Individual systems were integrated onto the vehicle and successful field trials were conducted in the presence of third parties at Castle Ward in Strangford Northern Ireland. The project was successful in demonstrating the variety of capabilities that WFS radio technology can bring to

unmanned vehicle operations underground.






Tracy Meharg, Invest NI's Managing Director of Innovation and Capability Development said: ***"The prototype, created by highly skilled experts using advanced communication applications, is a real achievement for the Belfast based Design Centre of WFS.***

"Working with the expertise of the University of Ulster and with assistance from Invest NI and EU funding, this innovative company has demonstrated command and control of an autonomous robot with docking and video transfer all below ground."

Bill Bardo, Technical Director at DTC comments ***'SEAS DTC has supported WFS's research into the use of low frequency radio to communicate with unmanned vehicles over the last 3 years. This latest demonstrator programme has shown that robotic vehicles can be modified using COTS product to extend the operating envelope into some of the most challenging underground and urban environments.'***

For more information about WFS Defense, please visit www.wfsdefense.com.

Notes for Editors

	<p>WFS Technologies is the world's leading supplier of through-water and through-ground wireless radio frequency (RF) technology for communication, navigation and power transfer.</p> <p>WFS's disruptive communications and sensing products extend the reach of conventional communications, telemetry, control systems and sensor networks providing cost savings, improvements in operational performance and flexibility. Headquartered near Edinburgh in the UK, WFS has research facilities in Belfast, Northern Ireland, and U.S. offices in Washington and Houston. www.wfs-tech.com</p>
	<p>Invest Northern Ireland is Northern Ireland's economic development agency and is part of the Department of Enterprise, Trade and Investment (DETI). Our overall goal is to help create wealth for the benefit of the whole community by strengthening the economy and helping it grow.</p> <p>We do this by supporting business development, helping to increase export levels, attracting high quality inward investment, and stimulating a culture of entrepreneurship and innovation. http://www.detini.gov.uk/</p> <p>Invest NI has offered support part funded by the European Regional Development Fund under the Sustainable Competitiveness Programme for Northern Ireland.</p>
	<p>iRobot designs and builds robots that make a difference. The company's home robots help people find smarter ways to clean, and its government and industrial robots help protect those in harm's way. iRobot's consumer and military robots feature iRobot Aware® robot intelligence systems, proprietary technology incorporating advanced concepts in navigation, mobility, manipulation and artificial intelligence. For more information about iRobot, please visit www.irobot.com.</p>
	<p>Systems Engineering for Autonomous Systems (SEAS) Defence Technology Centre (DTC), is the fourth DTC to be established by the UK Ministry of Defence. The SEAS DTC is operated by a UK industrial consortium and aims to research innovative technologies relevant to autonomous systems, at both whole-system and sub-system level and, through the adoption of Systems Engineering approaches, to facilitate pull-through of the technology into military capabilities. http://www.seasdtc.com/</p>
	<p>The University of Ulster is a multi-campus university located in Northern Ireland and is the largest single university in Ireland, with origins in the combination of the New University with Magee College, Ulster Polytechnic and the College of Art and Design. The University has four campuses, in Belfast, Coleraine, Magee College in Derry, and Jordanstown, and a fifth virtual campus, Campus One. The University of Ulster was shortlisted for the Sunday Times University of the Year award in 2001. http://www.ulster.ac.uk/.</p>

WFS Contact:

Amanda Collins

+44 845 862 1574

amanda@wfs-tech.com