



Joint Ground Robotics Enterprise Update

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Agenda



- **Ground Robotics Funding**
- **FY2009-2034 Unmanned Systems Roadmap Update**
- **Range Clearance Prize Competition**
- **Ground Robotics Conference**



Ground Robotics Funding



	Funding Source	FY10	FY11	FY12	FY13	FY14	TOTAL
UGV	RDT&E	\$126.87	\$125.78	\$104.17	\$79.0	\$80.6	\$516.42
	PROC	\$54.1	\$58.75	\$72.5	\$25.7	\$11.9	\$222.95
	O&M	\$1.3	\$1.3	\$1.3	\$1.3	\$1.3	\$6.5
TOTAL		\$182.27	\$185.83	\$177.97	\$106.0	\$93.8	\$745.87



FY2009-2034 Unmanned Systems Integrated Roadmap



- Roadmap was signed in the Spring by:
 - Under Secretary of Defense, Acquisition, Technology & Logistics
 - Vice Chairman of Joint Chiefs of Staff
 - Under Secretary of Defense for Intelligence
 - Assistant Secretary of Defense, Networks & Information Integration
 - Assistant Secretary of the Air Force, Acquisition
 - Assistant Secretary of the Navy, Research, Development & Acquisition
 - Assistant Secretary of the Army, Acquisition, Logistics & Technology
- Currently the roadmap is being distributed, and is posted on the JGRE website (www.jointrobotics.com)
- 2011-2036 Unmanned Systems Integrated Roadmap will be kicking off shortly
 - OSD's Air Warfare Office is championing this next roadmap



Top 10 Roadmap Actions Relative to the Ground Domain



- DoD Establish Annual review and assessment of Unmanned Activities Across Domains
 - Sent out Annual Data Call to 15 different organizations requesting input on Ground Robotics Portfolio related activities
 - Currently compiling all input to get complete picture of activities within ground robotics; over 100 submissions so far
- Establish Technology Criticality Assessment Process
- Emphasize, synchronize and coordinate R&D investment into non-RF comms
 - Compiled and identified requirements to initiate cross-domain projects addressing non-RF communications solutions
- Harmonize SAE AS-4 standard with NATO STANAG 4586
 - Proposed a Joint Standards Board, chartered by Defense Standardization Program Office
 - Member representation from all services and stakeholders



Top 10 Roadmap Actions Cont'



- Encourage more deliberate licensing and transfer of GFE and GFI to industry and academia
- Research Alternative Energy Sources
 - Compiled and identified requirements to move forward with cross-domain projects to develop Unmanned Vehicle energy sources
- Propose appropriate experimentation by JFCOM to support Operational concept development employing UMS
- Engagement of Industry and Academia to ensure understanding of DoD investment in unmanned systems
- Investigate appropriate use of Title 3 funding to stabilize select UMS product lines
- Datamine and consolidate UGV lessons learned for distribution to fellow domains



Robotics Range Clearance Prize Competition



- RFI for the Robotic Range Clearance Prize Competition went out at the end of July
 - 18 responses were received
- The competition was presented at the UXO Forum in Orlando at the end of August
 - A lot of interest was expressed
 - Several follow-on planning meetings occurred during that week
- Currently a planning meeting is taking place at Camp Guernsey in Wyoming
 - Camp Guernsey is a possible site for the qualification trials



Robotics Range Clearance Prize Competition



- Competition will be designed to foster COTS solutions for autonomous clearance of Unexploded Ordnance, debris and vegetation from training ranges
- Performance in the Competition will serve as input to source selection for an IDIQ contract to procure autonomous range clearance equipment
- Preliminary experimentation data projects potential costs saving of 30% and schedule reductions of 60% over current manual techniques





Ground Robotics Conference



- This office would like to focus efforts on having one Ground Robotics Conference on a routine basis
 - This would conserve money and time required to attend and plan these events
 - Recommend the different organizations work together and combine resources to make the Ground Robotics Capability Conference the “conference of choice” for the ground domain