



News Release

Defense Advanced Research Projects Agency

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IMMEDIATE RELEASE

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DARPA ANNOUNCES AWARD OF NEXT GENERATION COMMUNICATIONS PHASE II CONTRACTS

The Defense Advanced Research Projects Agency (DARPA), which is developing technologies to enable dynamic access to radio frequency spectrum, awarded contracts for the second phase of the Next Generation Communications (XG) program in July 2003.

In this second phase, XG contractors will develop communications protocols, sensing capabilities, and systems concepts to demonstrate the ability to dynamically access available spectrum resources without causing interference to existing legacy systems and users. Phase II efforts are as follows:

- Developing communications protocols: BBN Technologies, Cedar Rapids, Iowa (\$1,819,511)
- Developing sensing technologies: Rockwell Collins, Cedar Rapids, Iowa (\$571,926)
- Developing other advanced technologies: Raytheon, Falls Church, Va. (\$1,027,195); Shared Spectrum Co., McLean, Va. (\$555,027)
- Conducting system integration efforts: Lockheed Martin Advanced Technology Laboratories, Camden, N.J. (\$3,058,821); Raytheon, Falls Church, Va. (\$2,993,380); Shared Spectrum Co., McLean, Va. (\$2,999,447)

As the military transitions to new warfighting systems and doctrine, assured communications are vital to situation understanding and success on the battlefield. The resulting need for higher and more complex data services, coupled with the explosion of the commercial wireless market, strain the current limits of military spectrum allocations both domestically and abroad. XG technologies will provide a mechanism for rapid and efficient utilization of the shrinking military bandwidth, as well as a viable solution to the commercial carriers' demands for additional spectrum. The XG program seeks to improve spectral utilization of military radio frequency emitters by an order of magnitude, and ameliorate the potential crisis for DoD spectrum availability for military systems.

"In Phase I of the XG program we focused on getting our hands around the fundamental issues and technical challenges surrounding ad hoc spectrum access. We participated in a number of workshops at the Federal Communications Commission, hosted an industry panel discussion of our own, and initiated a public Request for Comment process so that all interested organizations and companies could be involved in the development of the technology," Preston

(more)

Marshall, DARPA's XG program manager, explained. "The Request for Comment process is designed to lead to the development of a unique framework that creates the core capabilities for controlling radio behaviors and allow additional capabilities to be added as technology and policy progress. Our Phase II contractors are now positioned to work toward developing the core capabilities and demonstrating alternative design approaches."

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