

Innovators wanted to design the FANG vehicle

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The Defense Advanced Research Projects Agency (DARPA) is calling on innovators with expertise in designing and engineering drivetrain and mobility systems to collaboratively design elements of a new amphibious infantry vehicle, the Fast, Adaptable, Next-Generation Ground Vehicle (FANG). Registration is now open for the FANG Mobility/Drivetrain

Challenge, the first of three planned FANG Challenges, which is set to kick off in January 2013. The winning team will be awarded a \$1,000,000 cash prize and will have its design built in the [iFAB Foundry](#).

Each of the three planned challenges will focus on increasingly complex vehicle subsystems and eventually on the design of a full, heavy amphibious infantry fighting vehicle that conforms to the requirements of the Marine Corps' Amphibious Combat Vehicle (ACV). In the course of the design challenges, participants will test DARPA's [META design tools](#) and its [VehicleFORGE collaboration environment](#), with the ultimate goal of demonstrating that the development timetable for a complex defense system can be compressed by a factor of five.

"FANG is applying a radical approach to the design and manufacture of a military ground vehicle while seeking to engage [innovators](#) outside of the traditional defense industry," said Army Lt. Col Nathan Wiedenman, program manager in DARPA's Tactical Technology Office. "By tapping fresh ideas and innovation, we are striving to fundamentally alter the way systems are designed, built and verified to significantly improve DoD's capacity to handle complexity, something that has rapidly outpaced DoD's existing 1960s-era approaches to managing it."

Many current approaches to the development of heavy [military vehicles](#) have proven inadequate for the timely delivery of much-needed capabilities to the warfighter. FANG's primary goal is to fundamentally alter the way systems are designed by decoupling design and fabrication and using foundry-style manufacturing to compress the development process timeline.

The second FANG Challenge, which will focus on chassis and structural subsystems for survivability, is expected to take place in late 2013. The third and final FANG Challenge, which should result in a full vehicle

design, is anticipated for 2014. In addition to receiving a cash prize, the [winning team](#) in the third and final challenge could have its vehicle tested by the Marine Corps alongside ACV prototypes in operational testing.

More information: For more information or to register for the first of DARPA's FANG Challenges, go to vehicleforge.org.

Provided by DARPA

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