# $LS^3$ Industry Day
# November 12, 2008

## Question/Answer Session

Q: BAA (page 15) has language about breaking up efforts into components. What does DARPA want: whole systems proposals or component proposals?

A: Whole system proposals. DARPA reserves the right to select portions.

Q: Is 36 inch deep water and 10 inch mud still a requirement? Not discussed during the brief.

A: Yes. The BAA is the official requirement, slides presented do not override.

Q: Is 1250 lbs total weight without payload?

A: Total weight is with payload.

Q: What is the anticipated budget for this program?

A: There is not one, proposal should state their costs.

Q: How is the foothold classification going to be evaluated? (95% of bad -95% of good)

A: Will depend on the platform. Performer will work with the DARPA test director to develop reasonable test conditions.

Q: How important is it to operate at night?

A: Night time operation is a requirement. It is a 24 hour continuous mission.

Q: Do sensors need to operate in the dark?

A: Yes.

Q: Is there any user mission concerns about active sensors for perception?

A: No.

Q: Is the USMC planning to invest in the $LS^3$ program?

A: There is no official program involvement with the USMC

Q: Has DARPA selected an organization to support independent test and evaluation? If so, who is it?

A: No. However, it is anticipated the program will follow the current TTO model and use the DARPA technical team to conduct experiments.

Q: What does “maneuver at objective” mean?

A: Once system reaches objective, local movements (50-100m) within operating area.

Q: Is the vehicle required to be able to take evasive action or position itself in less exposed situations during combat?

A: No, soldier would be required to direct platform in that situation

Q: The BAA calls for two prototypes at end of the program. Does the Government expect a design that can be manufactured and produced in volume? Prototype design does not equal design for production.

A: A final design is not expected as a deliverable. However, we want designs that are created with produce-ability and field-ability in mind.

Q: Do you want design to produce in volume?

A: Don’t want design package as deliverable but do want design that they can produce from it.

Q: Are there any requirements on the operator payload?

A: No specific requirements but expect reasonable interface that won’t be soldier burden.

Q: Can you say a few words about what you are looking for in a prime integrator?

A: We believe $LS^3$ will require a team with broad technical and management skills to task subs, make decisions on trade-offs, and interface with DARPA.

Q: Will the USMC personnel/organization that funded the Big Dog effort be part of the proposal evaluation team?

A: DARPA doesn’t discuss who is on the evaluation team.

Q: Who performed the power train analysis that was shown?

A: Internal technical support team.

Q: Does DARPA have production cost targets to enable $LS^3$ to be accepted by the USMC?

A: No, but unit cost is an issue.

Q: Will DARPA accept a concept that could meet the mission requirements without being “legged”?

A: Intent is for a legged program with a walking squad capability. DARPA will accept other submissions but doesn’t recommend them.

Q: What is your expectation for the CLPP? Should it include reliability and maintainability analysis?

A: Yes.

Q: Both speakers talked about the importance of component maturity. However, very few companies have mature legged technology. Does a proposer need existing legged platform experience?

A: No, you don’t need existing legged technology. DARPA is looking for a good team that has strengths in all the key technical areas and has an innovative design that meets the BAA requirements.