



SBIR 24.4 R2 Q&A Telecon Transcript
SOCOM244-003: Water Tester at Point of Need

1. The goal of the solution is contaminant detection, not contaminant filtering, correct?

Yes

2. Phase 2 information is not listed will that be provided?

Yes it will – if/when the effort progresses to a Phase II.

3. How many awards will be made?

Sorry, we try not to answer that question because we'd like to restrict the questions to technical clarifying questions, but the number of Phase I awards that will be made depends upon a lot of different factors.

4. What is the decision timeline and kickoff?

Once the Phase I contracts are awarded, there will be a kickoff meeting when the technical point of contact will provide a description of what the milestones are and the meetings that will be conducted and how the Phase I will be managed.

5. For contaminants detection do all targets need to be detected in one test or can multiple tests/cartridges be used

Yes, multiple test cartridges can be used. It does not need to be in one complete test. The tests are small and capable. If the total coliforms and E coli are two separate tests or one, and then arsenic lead, copper, cyanide are unique cartridges, that's completely acceptable.

6. Is there a direct to Phase II option?

This is a Phase I topic and so it's being advertised as a Phase I topic where we're expecting Phase I proposals. This is not a direct to Phase II technology pursuit.

7. What features have not been found in existing market solutions for contaminant detection that are needed for this project?

The driving impetus, to answer this question is in regard to the total coliform and E coli. Typically, what we work with is 24 hours, which is way too long. What we have found in the market solution is 8 hours, which has been mixed results. We were trying to find something that would give a faster turnaround for us to be able to action more immediately with limited time on the ground at point of need when you're far forward in certain situations. As far as arsenic, lead, copper and cyanide, yes, those are those are available. What we are trying to do is make this a small package that can be rugged, durable, carried in luggage where it's all contained. These were the ones that kind of bubbled to the top. We also were interested in a test for crypto, but that's kind of where this is at. It was more of, we understand they know that those other four parameters are available, but we wanted to compact this into one small, rugged solution.

8. What are the technical factors for selection?

This is a Phase I feasibility study and so what we're looking for is what is in the art of the possible. To a large extent what is being proposed is going to be looked at from a feasibility perspective.





9. Is there a time limitation for detecting complete analysis for arsenic, lead, copper, and cyanide?

Not particularly. We require all analysis to be complete within 4 hours for all listed parameters.

10. Can you talk more about the use case, it seems like this is far forward deployment for the warfighter?

In the sense that what we're trying to do is bring this out when folks go to a point of need, but it would also be possibly during exercises where we have limited capability, we can bring limited gear when we want to entrust some of the sampling with other people that maybe are not public health experts, but can run this system and be able to provide information on the water quality that they're being exposed to. This is to the extent that our public health or other professionals go forward where they need to set up a small camp, this would be value added. That's why we're looking for that rugged, lower in weight, far forward able to carry along and withstand conditions.

11. Can you expand on what is meant by "feasibility study"? What are you expecting to see?

Congress created the SBIR program for small businesses to develop innovative technologies. When we go out with a problem that is described in our Phase I topic write-ups, we're looking for private industry to come up with innovative ways to solve that problem. We've also included a definition of what we consider to be a feasibility study and the Phase I topic write-up itself. If you look at the Phase I topic write-up, there'll be a paragraph in there that defines what a feasibility study is as it relates to doing business with the USSOCOM.

12. Would it be okay if there were two systems in the luggage, one for pathogen detection and one for metal detection?

We would veer away from this only because we're looking for compact. We have a limited space. Obviously, within your luggage, you can have all the other items. If we're flying military air, that's a different story, but a lot of times we are not. We would buy for one system if we had to rack and stack for us, what would be most value added is the reduction of analysis for total coliforms and E coli. If a lot of this comes back and it's too difficult to combine into one system, then we would readily think the total coliforms and E coli would be the sole detection system that we'd want to go for.

13. Is there an estimation of usage (i.e. monthly) of the chosen solution?

If we could get this out there it would be used more often, it could be used on a weekly basis. It's very difficult to say but for point of need and getting this out there, the usage is very broad in the sense that for all of our exercises, everything that we do we have to make sure our water testing is on point. With that reduced timeline, that allows us a lot more room to provide information to commanders and our public health professionals. It's hard to say at this point, but if we had something that was viable and it worked, then it would be implemented and used accordingly.

14. Can solutions only be offered by "small businesses"?

It is only small businesses that can propose solutions. If you go to www.sbir.gov, there's additional eligibility requirements that a firm must have in order to be able to submit a proposal to the SBIR program.





15. Are Phase 1 projects expected to generate new data or is that just in Phase 2?

Remember, a Phase I is a feasibility study and so it's pretty much left to the firm on how they're going to approach to solve a problem. If that generates new data, then it would be in the feasibility study where that new data would be revealed. Phase II is just a second phase in the SBIR program where what was determined to be feasible in Phase I can be demonstrated in Phase II. It's not that in Phase II you might not have new data, but think it's more applicable to the Phase I.

16. Is just the system supposed to meet that weight requirement or the entire luggage set?

It would go in luggage, it could be in a Contico (this is a type of traveling case/portable footlocker storage locker), it could be in a kickbox. The weight requirement is strictly for the system so the 25 lbs was the goal for the system that it was that weight or under, not your luggage.

17. Will there be a targeted price/cost basis for the final product/solution in the full FOA (funding opportunity announcement)?

I'm going to have to admit I'm not really familiar with the terms and I'm not so sure how I can how I can help answer that particular question.

18. Are E.Coli and Total Coliform testing needs firm, or can other rapid microbial methods be considered as surrogate estimates?

E coli and total coliform form testing needs are fairly firm because that's what all of our guidance and our doctrine provides the guidelines for. We would need to understand when you say rapid microbial methods as surrogates, we're curious as to what you mean. We have used other methodologies, but confirming that there's E coli and the extent of the total coliforms are what we are looking for in this instance to then determine; Can we use this water source? Do we need to chlorinate? To what extent?

19. During Phase I can we communicate with the end users to get feedback on design and feasibility?

Phase I, what the awarding firms would do would be communicating with the contracting officer's representative and the technical points of contact that are assigned to that Phase I contract. Typically, the firms would not, on their own, reach out to the end users. The firms would take the lead from the contracting officer representative, who would bring the end users into the discussion as necessary.

20. How is "total coliforms" defined? what other pathogens are included?

Generally with the total coliforms, we were looking at those generally gram-negative Bacillus, but we use it as a broad spectrum. In the past, total coliforms, whether it was E coli or not, we had to treat, it drives our treatment plan to ensure that the water is acceptable, maybe not always for consumption, but if it's for showering or whatever the case may be. The other pathogen that we were concerned about was the E coli, obviously that's why that was highlighted specifically. We put as an optional was the Cryptosporidium piece as another aspect because obviously not so easy to treat but hope that's helpful. If you need more clarification on the total coliforms, that's generally how we broad spectrally defined it, but we can dig deeper and find specifically in tests we've used generally in the military, what exactly they were looking for and get you a better answer if you like.





21. Will you be providing guidance in the full proposal announcement on what the eventual product/solution should cost as delivered to DOD?

It could, something like; If this wasn't described in the Phase I feasibility study there would be a preferred cost of what this solution should be. It is something that could be included in Phase II but it's up to the topic author and the folks looking for the technology and the Government to make that decision. If they want to include what the cost should be, that would eventually the DoD would pay for the item being delivered.

22. If a solution goes past Phase I and is launched, is there anything in the contract that would prevent the solution from being sold to a non-SOCOM customer?

Yep, absolutely and in the SBIR program, the way the SBIR program is set up is with the expectation that there will be a dual use application for the technologies that are being developed. To the extent that this could go into private industry in the public sector, exactly right, yes.

23. Can some aspects of testing be done in a field lab or is it a requirement that all aspects of testing be done in the field at the point of sampling?

Yes, in this instance we are looking for all aspects of testing to be done in the field at the point of need. A lot of times for us within the SOCOM enterprise, we don't have a field lab nearby. This would completely be autonomous at the point of sampling over.

24. What are typical water sample types? Are those treated potable water or grey water or just any kind from river/lake etc?

With these specifics, this would be probably not potable be somewhere between we're not sure if it's potable. For example, if someone saying sure we drink this water, as most of you probably know folks that have established bacteria within their bellies are accustomed to a specific type of water that when our folks drink it, that maybe or here from the West are not familiar, it wreaks havoc. It would be claimed potable water or Grey water (water from sinks, showers and washing machine, etc...) It would not necessarily be from a river or lake. We were looking at this for; Could we use this for showering? Could we use this for anything else that we might require water that is not necessarily treated for potability standards, but that we are capable. It'd be somewhere between that unconfirmed potable and Grey water sample type.

25. Can we email questions after meeting related to program prep. If so who would be key contact

You can ask questions through the DoD DSIP, which stands for Department of Defense SBIR/STTR Innovation Program and that's where the solicitation is going to be released. There is what's called SITIS section in the DSIP section where you can go ahead and ask technical clarifying questions. We're not so sure what you mean by program preparation, but the questions that you can ask in the pre-release and in the open stage of the broad agency announcement or technical clarifying questions that help you enhance your understanding of what the requirement is.

26. So a SOCOM-purchased solution could be sold to non-military/government customers also?

Yep, exactly. We would hope that that would be the case.





27. How much water should the device be able to test/treat?

This will strictly be for testing. We would say, this is more driven by how much is required, generally we have like a coffee cup size that we work with. We'd say upwards of 16 ounces, 20 ounces to test. The treat is a different aspect but to test, we think that would be sufficient although it is driven by your all's requirements of how much would be needed. In the past the other systems we've utilized have used upwards of 8 to 16 ounces.

28. For arsenic, lead, copper, are we looking at the total analysis or there are specific forms that DoD is more interested in?

No, we're looking at total analysis. There's a guideline that we utilize. We are looking for total analysis of arsenic, lead and copper. If folks are exposed to high levels we want to have that information to mitigate at the point of need to the extent possible.

