



Muti-Capable Distribution Platform (MCDP) Assessment Event (AE)

15-17 November 2022

Submit NLT 21 October 2022 at 11:59 PM ET

1. Are partial solutions (e.g., subsystems) being considered? Or only complete, end-to-end demonstrations?

Yes, we will accept and consider partial solutions. Whole solutions are preferred, but we will accept partial solutions as well.

2. Will a physical prototype be required at the November assessment?

It would be preferable to have a prototype available for the November assessment, but as we go through the downselect process, if the preferred options are not ready for prototype at that time, then it would be acceptable for you to not have one.

3. Is this truly an autonomous effort or will there be comms to/from?

The idea is that this platform currently could have comms to and from to help stop flight and control up, but we would like to have a path forward of a system that's not currently able to operate autonomously that could be operated autonomously further into production. As we move forward, we'd like to have a solution that is more autonomous.

4. Will there be any teaming opportunities or resources facilitated by USSOCOM?

As far as SOFWERX is involved, this is not one of our facilitated team events, unfortunately. But, if you want to share your contact information in the Zoom chat, that is totally fine. We encourage you to contact each other and work together on a submission.

Although we don't have a specific timeline or plans to do a facilitated integration, we do understand that there are people on this line who probably have a segment of the technology that may prove beneficial for future downselect and integration.

5. The SOFWERX announcement describes the deliverable as a "prototype." Is there time for development?

The schedule does show that a prototype demonstration is in early November. If the prototype is ready at that point, then we can do the Assessment event for that, but if there is not a prototype available, then we can work with that moving forward.

6. Are there specific milestones/deliverables that must be met? What are they?

The primary objectives are that it can have a payload of up to 500lbs and move that up to 300 miles. It can have multiple stops within those 300 miles, or it can be one constant trip. So, the main objectives are the range and the payload.

7. Has funding been allocated? And if so, what is the customer's budget?





We currently have funding to conduct this experiment. After the experiment is over, we have partnerships that we're working with other people/services to continue forward, but PMEF/POSOF does not have dedicated funding for this effort yet.

8. If selected, what is the timeline for delivery of 10x prototypes?

The "10x prototypes" was a typo and has been fixed. Stakeholder team has not specified a number of prototypes.

9. What is the expected TRL of system for the November assessment?

We're looking for a system that can operate on its own in an outdoor environment. With the understanding that a TR level 7 is an operational environment of an operational prototype, this is not necessarily an operational environment and not a GPS-denied environment, but somewhere in the 5-7 range. Obviously, understanding that there will likely be some development after this assessment event, but still looking at something that can demonstrate capabilities at that event.

10. Will vehicles able to carry 20-70lbs of payload be considered? Or is 500lbs a hard minimum?

It will be considered as an option for other solutions. The other part to that is if it's scalable up to be able to carry 500lbs, and the last consideration is what range it is able to carry that payload at.

11. Would you be interested in (or adjust the scope) to include a larger platform capable of short take-offs & landings?

Yes, we would consider it, but ideally this will be a compact solution that can fit into a 20-ft Conex and can do vertical take-offs.

12. Is there a fly-off before selection of production awardee? If so, where and when?

The planned "fly-off" will take place in Tampa at the November assessment event.

13. Can you discuss quantities of materials you would like to move, distances to span, and platform preferences?

The platform preferences are open to interpretation, distance is, of course, 300 nautical miles, and we are not open to discuss materials at this time.

14. Are there other threshold requirements the prototype MCDP must meet? What about objective requirements?

Please familiarize yourself with the solicitation, which lists the details for the objective requirements.

15. What is the timeline for the first prototype flight?

Again, the assessment event will take place mid-November.

16. Would you consider aerial delivery resupply options (such as parachuted pods)?

While those are valuable solutions, they would not meet our need at this point, so we would not be looking for aerial delivery resupply options at this time.





- 17. Is the 500lb lift requirement a single payload item or multiple payloads that total 500lbs, or potentially both? Are payload dimensions available?**

Payload dimensions are not available at this time, and yes, it could be either a single payload item weighing 500lbs or multiple items totaling 500lbs.

- 18. “The UAS will deliver the payload and return to a launch/recover site *with* requiring SOF interaction at the delivery site(s).” Is it supposed to be “without”?**

That is correct. It would be preferable that this system would be able to return without SOF interaction. Good catch!

- 19. What kind of physical environments is SOCOM primarily trying to operate this aircraft in? Forests, deserts, coastline, urban, or all of the above?**

All of the above. The system needs to be prepared to operate in any of those situations.

- 20. For a “dumb” component like an electric brushless DC motor, is there a requirement for US suppliers only? How about off-the-shelf RC motor vendors?**

Don't limit yourself, at least in the prototype phase for consideration of these type of components. When we get to the point where we're talking production, we will address any FAR requirements and waivers as necessary.

- 21. You mentioned that not all requirements need to be met at the same time. What is negotiable? What are your must-have categories? (e.g., VTOL is a must, but range is negotiable)**

I hate to say negotiable, but the answer is that most of these solutions are workable as long as there's a plan on maturing it along a certain timeline. So, if you're unable to make the 300-mile range today, but with this technology maturation process, you'll be able to do it in 6-8 months, I think that makes it a stronger contender. Same thing with payload. Vertical take-off is preferable the whole way through.

- 22. What are the comms requirements: SATCOM? Radio? Comms with ship? Comms with ground units? C2 systems? Only close range or full flight?**

We're not going to box anybody in on this one as far as the specific comm requirements. The only thing we're pushing for is that it has to have the ability to communicate beyond line of sight.

- 23. What kind of damage tolerance is expected from this platform to operate in a contested environment? Small arms, RPG, etc.?**

Again, not going to fence anybody in on this. It would be nice if it can handle small arms, or fragmentation from flak, or something along those lines, but ultimately this is a logistics platform. It's not a hardened, armored capability, at least not yet. Maybe in the future, once vendors down-selected and we move forward, it may become necessary depending on the operational environment.

- 24. Landing on a ship? Autonomous? Radio-controlled? How does the UAS get the position of the ship?**





We have not driven the requirement for that, whether it's going to be a ? type of scenario where it's a pre-identified destination where it can touch the ship while it's moving or if it's a stationary platform. That is an end state. Our primary goals are still getting back to the ability to do vertical take-off, 500lbs, 300 miles.

25. Are parts sourced from any NATO-member country okay?

At this time, we're not restricting sourcing of minor parts as long as the overall platform, at least for this solicitation, is a primary U.S. manufacturer/U.S. capability.

26. The requirement for a 500lb payload is clear. What op environment do you want to hover with this payload: 4,000ft/95F or 6,000ft/95F?

I don't see any specifics for this in the solicitation, so we're not going to limit you there. The main catch is, can you handle the payload? And at the range?

27. The 300nm is clear, yet is it radius of action or endurance?

We are not differentiating between the two of those. 300 miles traveled is 300 miles traveled.

28. Payload bay volume? Survivability requirements? Armed Platform weapons requirement? Acoustics requirement? Hoisting personnel up and down?

Those are all open and unspecified.

29. Will the takeoff/land sites be land-based, shipboard, or both?

For the intent of this effort, we would suggest focusing your efforts on land sites.

30. How many air vehicle concepts do you anticipate working with/down selecting?

At this time, we have not disclosed how many systems we're looking at down selecting to. The number of people we downselect to at this time will be based on the white papers received and what we think are the most viable concepts.

31. Cargo: volume/dimensions? Unique/oddly shaped cargo? All internal cargo? Sling load? Use of pallets?

We are not limiting you by the shape or dimensions of the cargo, just that it can lift 500lbs and transport 300 miles. Those (listed in question) are all things that we can work on later on. But main thing is the payload and range.

32. Is this for logistics only, or logistics + ISR?

At this time, this platform is intended only for logistics.

33. Do you have requirements for delivery of fuel?

So at this time, the payload could be fuel, it could be water, it could be hard goods. The main catch is the payload weight capacity of 500lbs. We are not detailing what that is comprised of.

34. Does the customer expect an actual UAV pilot to operate the MCDP, or do they desire a true autonomous solution?





By the time of the Assessment Event (15-17 November), it would be acceptable to have a UAV pilot, with the intent of having it be autonomous at production. So an autonomous solution can be still in development at the time of the Assessment Event.

35. Will SOFWERX/SOCOM consider a proposal to demonstrate a collision-avoidance capability as a subsystem of the MCDP?

Yes, currently the solicitation is for a full system, but a demonstration for a collision-avoidance capability would be value added. So, we would accept that.

36. May we add an appendix to the 5-page white paper application with supporting material, such a slide deck? Would supporting material be reviewed?

You are welcome to attach additional information as an appendix but there is not a guarantee that we would review it or take it into account as part of the downselect process.

37. Can a vendor demonstrate their vehicles VTOL and payload capabilities using a manned pilot for the November assessment event, assuming an automation kit exists?

Yes, please feel free to use a pilot for the November assessment event. If an automation kit exists, you can do that as well. But if it doesn't exist, and you plan on developing it going forward, please feel free to us a pilot at the November event.

38. Is there any way to demonstrate at another site or does it have to be in Tampa?

Please submit your proposed alternate location and the rationale for why, so that we can respond appropriately, and for the rest of the group to see if there is a reasonable exception or expectation for certain requirements, we will definitely evaluate that. So please submit, even if you don't think you could do it at Tampa.

39. Is there a possibility for multiple winners/contract awardees after the downselect?

Government stakeholders never have any pre-determined number of downselected vendors. Through the SOFWERX process, they are able to choose one, some, or none. Selected and non-selected vendors will receive notice on or around 31 October.

40. Will you consider separate software pathways (i.e., autonomy)? Or are you looking for a single software/hardware solution?

I believe the question is asking if we are looking for a single capability that does everything we're asking for, or are we looking for the opportunity for people to partner up to produce a more viable prototype or capability... if that's what it is, then yes, we're definitely open to vendors working with each other to try to find a viable solution. We're not married to a single platform, if it can't do everything.

41. When is the first demo flight?

The Assessment Event is on 15-17 November. If selected, you will receive an invitation to select your time slot/date.





42. What is the customer's expectation with regard to training? What's the maximum number of personnel requirement for set-up, launch, and recovery of the MCDP?

The solicitation does not put an emphasis on the training requirements or personnel requirements for set-up, launch, or recovery.

43. For the ROM, are the research and development costs to improve autonomous capabilities expected, or just the cost of current systems available?

The cost of those expecting to see is the cost at procurement for the final system. But you can, if you like, to show the cost of the current system, and then the cost to develop the Delta to get that file procurement solution, and it's acceptable as well. But we'd like to the final cost to procure these.

44. Maximum sea state for ship ops? Big decks only? Small boys?

The solicitation did not call out sea landings or vessel landings. So at this point we're not going to specify.

45. What is driving the platform size parameters?

That's in reference to the 20-foot shipping container, and that's a matter of just being able to keep it consolidated, move throughout the world, either by C130, and/or C5 or C17 aircraft, or on a shipping vessel.

46. Referring to the Operational Use Scenario section of the requirements document, how far is the launch/recovery from the payload delivery site?

That ties back to the total range of the system. So up to 300nm.

47. Would alternate autonomous navigation methods be required at all times, or only when GPS is unavailable?

We'll leave that up to you as a developer of the solution.

48. Assuming there will be no SOF interaction at the delivery site, once the cargo is delivered, will SOF personnel then extract the contents of the cargo?

Yes

49. For the prototype in November, is that 2023?

The assessment event is scheduled for 15-17 November 2022.

50. "Support easy integration of cameras via standard interfaces to kits" is mentioned – would these cameras be SOCOM's? Commercial off-the-shelf?

That was a hold-over from a previous requirement that I did not QC effectively, so that is an invalid requirement.

51. When do you hope to have a fully operational platform ready for live, real-world deployment?

I'll ask you to refer back to the solicitation – we have not detailed it out. We would like you to tell us when you would have one ready for real-world deployment.





52. Are international companies allow to participate?

We encourage all companies to participate. When we get to the downselect process we will evaluate that with our contracting and agreement staff, to make sure that we meet all FAR (Federal Acquisition Regulation) requirements in according to the national defense security strategy.

53. If a YouTube video link is included in the white paper, will evaluators watch the video?

Yes, if there is a YouTube link relevant to the vendor submission, we will attempt to do it. I say "attempt" because most of our work is done on government computers, and as long as there are no technical difficulties, it will be part of the evaluation process over.

54. Are there any issues with regards to non-US systems or sub-systems?

For the purpose of the submissions and solicitation, there are no issues. Again, once we get to a later stage in the process, we have to comply with the FAR and it will be determined by our contracting staff and any restrictions associated with that.

55. Passengers: Cert. For CASEVAC? Cert. For MEDEVAC?

Please refer to the solicitation. We did not specify what would be moved. There's no plan on moving passengers or using it for MEDEVAC. This is used for legitimate cargo, so right now there is no plan for CASEVAC or MEDEVAC.

56. Is there a speed and/or operating altitude requirement?

Please disclose what you can achieve, and we'll evaluate based on that.

57. Is there a takeoff and landing area size constraint threshold and objective?

We did not specify a size constraint for the threshold and objective for landing area. I'd say we would like you to propose what you can achieve to.

58. When would PEO-SOFSA expect to receive dedicated funding for this effort? (1 year, 2 years, etc.)

I'm not prepared to discuss at this time. If you are chosen, we can discuss at that point.

59. Does PEO-SOFSA lay claim to any IP generated after a contract is awarded?

Depending on the involvement of the Government funding into it, the Government could request government purpose rights.

60. Can you clarify that the UAS will land without SOF interaction, but SOF personnel are able to manually remove the cargo from the UAS once it has landed?

It was never specified that the UAS would land to drop off cargo. I think that's an assumption that you made.

61. Runway independence is clear, yet should the UAS have the ability to have a vertical rate of climb (FAA min. Is 150 ft. per minute)?

We have not stated a minimum/maximum requirement for that. So we have not put constraints on the rate of climbing





62. Will optionally piloted vehicles (with pilot in the seat) be considered for the November assessment event?

Yes, they will be considered.

63. Required indicated cruise airspeed and altitude? Required indicated dash airspeed and altitude?

Parameters were not stated/it is open.

64. Range is given as 300nm – is that meant to be a combat radius of 150nm? Hover out of ground effect, with a maximum load, at a pressure altitude?

Range – 300nm. We did not specify how the trip would be set up.

65. Cargo slinging loads? Time limit to assemble the modular aircraft? How large is the team that assembles the aircraft?

Can it sling loads? Yes. Time limit to assemble? The time is not specified but should be as short of a time as possible. Team? I plan on a relatively small team.

66. The template states “past or current efforts in...demonstrated battery technology.” Can you confirm this is applicable to the instant requirement?

The “Approach” paragraph should focus on the description of how your technology/capability solves the designated Focus Area. If your technology/capability utilizes battery power in some form or fashion, we would be interested in hearing about your battery technology, if applicable.

67. Will transporting/retrieving live personnel ever be required or desired?

Unable to make that prediction at this time. Current requirement is only for a platform to conduct logistics operations/material resupply

68. Referring to section 4 of the assessment criteria System Architecture Design, which components need to be user-swappable?

LRUs and other major components and subsystems that may need to be replaced at the user level; 10-level maintenance. Maintenance may have to be conducted in a location that access to specialty tools is not feasible.

69. The UAV size remains a hard requirement or not?

The specified size is our current requirement objective and preferred; however, other sizes will be considered.

70. Sensors: Autonomous avoidance? Automatic LZ detection and landing? Aircraft heartbeat?

Reference the Standards/Desirements section of the criteria.

71. Is the 300nm range requirement for one way or round trip (150 miles there and 150 miles back)?

300nm (w/ max payload) is the total range before re-fuel/re-charge is required; that can be 300 one way or 150 there and back, etc.



72. Operating environment? Altitude requirement for flying and hover? Rain? Snow? Icing? Temperature? Wind? Dust/dirt?

The operating environment is unknown; it is preferred that the platform be able to operating in a multitude of environments and conditions.

73. Performance? Minimum range? Speed? Endurance?

Reference the requirements outlined in the Standards/Desirements portion of the assessment criteria.

74. Is the 300 miles one way or round trip?

Reference the answer to question #75.

75. Can funding be awarded to selectees that demonstrate proof of principle at the fly-off? Our scaled down platform will require additional capital.

We are currently only funded through this Assessment Event. We are working to establish partnerships with other organizations/services to leverage funding beyond this event.

