



2024 Blue Skies Competition Q&A Session #2 Summary Document January 25, 2024; 3:30 – 4:30 PM ET

Questions Received on the Call

1. Does the W9 Form go through the University Accounting or Finance Department?

The W9 Form will go to the office at your university responsible for completing such forms, and can go to either of the entities listed, or to another office, if appropriate. Teams should work with their advisor to determine who should complete the W9 Form.

2. Is the 300 dpi photo or graphic just something that shows visually what our concept or idea is, or is it like the video and needs to be in that format?

The 300 dpi photo or graphic is separate from the video. The graphic or photo will be a part of your quad chart (and therefore part of your proposal) and should be thought of as a snapshot of your concept. You will also be asked to supply a high-resolution version of that graphic. The photo or graphic should quickly convey your concept to a variety of audiences and should be visual in nature. Ultimately, the photo or graphic you submit in the proposal stage will likely be a good jumping off point for the development of an infographic for finalist teams. *Note that creating this graphic or image should be a secondary focus of your proposal package. Teams should focus on delivering a proposal and video that focuses on the elements outlined in the scoring rubric.*

3. So, we should probably limit the number of words on the photo or graphic or use no words at all?

That is correct. Your photo or graphic should be visual in nature (eye-catching to an online news article viewer, for example). You can save the words for the infographic if you're selected as a finalist.

4. Can a UML model be used as a graphic for showcasing our concept?

Your graphic or image should be just that: a graphic or image. It should be something that visually conveys your topic and draws in the viewer. Sometimes flow charts and Power Point Presentations don't really draw people in. This is an opportunity for storytelling. You have one image to tell what your whole concept is about. While informative, UMLs and boxes and lines may not fully articulate your entire story and its impact.

- 5. This is also a question about the graphic, but is it expected to be a diagram describing a system or is it more so an “artist’s depiction” image of how the solution might look.**

An “artist’s depiction” is an accurate way to view the graphic requirement. The graphic should be a visual, pictorial depiction as opposed to a flow chart or diagram.

- 6. How do you envision teams balancing their innovation with feasibility. How will these elements be judged and what is your guidance on that?**

The evaluation criteria should help teams understand how to balance innovation with feasibility. Look at the point values assigned to each criterion to understand how to structure your concept proposal. We encourage students to pick different technologies that aren’t the most popular ones in play today because we want to see innovation. Creativity and research are important to NASA as a forward-thinking agency. But ideas should also be grounded in reality – think about cost, training, etc. As you’re ideating, you should continually be challenging your concepts against assumptions and your understanding of the conditions in which these technologies must work. Even simple solutions could be groundbreaking. You may find that sometimes innovation may be smaller steps as opposed to huge leaps.

- 7. What implementation timeframe are you looking for? 1 year, 5 years, 10, 50? Our solution may require stages that depend on the regulations, and we know that regulations in aviation take time...Also, do we need to estimate the required budget?**

The Competition Guidelines state that solutions should be considered for implementation by 2035. Climate change, its effects on natural disasters, and the need to deploy technology in disaster management are near-term problems, which is why the competition has a more near-term timeline than previous Blue Skies competitions. Obviously, regulations take time to change. Your proposal timeline should consider necessary regulation changes alongside your research and assumptions.

Regarding budgets, we don’t expect to read budget plans, and we’re not looking for a detailed budget on how you’d execute the concept. However, understanding the costs associated with your concept is important, and you do need to justify the *feasibility* of those costs.

- 8. It was mentioned that we need high-level systems but not detailed design. Could you give an example or elaborate on when we are crossing the lines of detailed design?**

Ultimately, it’s up to each team to decide how best to balance the presentation of material in the proposal. We encourage you to focus on conveying your concept in the most effective manner – remembering that you’re looking to sell the concept to the judging panel in just 5-7 pages. This guidance is meant to remind you to not get bogged down in the details and therefore sacrifice important, high-level points. This isn’t an aircraft design competition: We’re not looking for you to design the aircraft yourself. The vehicle or method you’re using for the vehicle is only a small piece of the puzzle. Human considerations also play a large – or

larger – role. Make sure you articulate the operation, the workflow, how that particular contribution of technology works and accomplishes your use case.

9. Does the video have to meet the maximum time of two minutes? So, for example, could my team make a 30-second video?

Two minutes is the maximum length of your video. Teams absolutely may submit a video that is not that long. Just be sure your video conveys your concept and proposal the best you can using that medium!

10. Instead of physical prototypes, can we include CAD models in our proposal?

The competition does not require a CAD model or a physical prototype. That said, a picture can be worth 1,000 words. Teams can include a CAD model, but we encourage you to prioritize the elements of the written proposal and the video. If a CAD model is included, be sure it augments your proposal.

11. Building on the detailed design question, how much weight would be put on how our idea interacts (with end users, environment, affected communities, other systems, etc.)?

There's no clear-cut answer to this as it will be up to each team's discretion on how to balance this information. It's a bit of an art. If you *don't* consider those aspects, it would make for a weak proposal, but you probably don't have the space in your proposal to *overanalyze* it. You need to factor in how users will be using these systems, and you must consider the environment (physical, operational, political, etc)—it's all a part of the feasibility assessment. So, consider these things, but also don't use 90% of your proposal real estate building up the problem; we still need to hear the solution.

12. In the proposal, it says to “Conceptualize the implementation and then chart a path to deployment.” Could you give examples of what you'd like us to include?

You want to set your vision and say, “This is what we want to accomplish, and this is ideally how our concept would operate in its end state.” Obviously, you can't just implement that in one day, so there's going to have to be a path. Maybe there are some pieces of technology that are still being developed or maybe there are end users or regulations that will have to come into place for your concept to work. When you look at this problem you're choosing, think about what is currently working and what isn't – what is preventing users from using something more modern? Or, maybe they are using the latest and greatest technology but not the best process.

From the [2024 Competition Guidelines](#):

Conceptualize implementation: Provide an overview and concept of operations (ConOps) of the system(s) addressing the team-identified disaster management use case(s). Concepts must consider:

- a. Minimal barriers to adoption/use (i.e. effectiveness, simplicity, high reliability, user-friendliness)

- b. Cost/return on investment
- c. Support system requirements
- d. Connectivity constraints (lack of internet, power, GPS, etc.)
- e. Challenges posed by adverse environmental conditions (wind, rain, smoke, etc.)
- f. Interoperability with existing people, processes, organizations, solutions, and technologies
- g. Expected improvement over existing practices

13. What is the difference between implementation and deployment in this space? They sound like they overlap a little bit.

There is definitely overlap between the two. Consider implementation as the start – “How do I build and get this system into the hands of an emergency responder?” Deployment looks more toward the backend of the lifecycle of the technology. Deployment may look like: “How do I scale this technology up or account for different environmental conditions? How do I consider training people?”

Some people may define it differently, and if you do define it differently, explain that in your proposal.

14. In the situation assessment guidelines, it says in a bullet point “Team-defined use case/opportunity for impact.” Can you please further explain what that means?

The use case/opportunity for impact is the problem you’re trying to solve, and by “team-defined”, we mean we want you to identify and explain that opportunity in your proposal. Your use case will be tied to your concept, which should be innovative and spring from your research, not from looking up ten ideas online and picking one.