

FAQs – Advanced Polar Snow and Terrain Sensing

Last updated February 23, 2026

Regarding the Objective Goal for Topic 1 (mapped data over 100km+ scale domains) and the Threshold requirement (sub-100m resolution): Must the proposed novel sensing hardware physically cover the entire 100km+ domain itself, or is a solution considered responsive if it develops highly accurate, localized in-situ sensing that is explicitly designed to be fused with existing, broadly available remote-sensing priors to synthesize the 100km+ scale?

No, the physical sensing hardware need not cover the entire domain. The expected output, however, should be a spatially continuous map over the entire domain. The government is interested in the best path to that goal in a wholistic sense. If the offeror feels a particular sensing technology offering localized, in situ sensing, fused with remote sensing priors is the best path, that is something the government would consider on an equal basis to a different technology that directly sensed over the whole domain. The key is to get an accurate map in the best way. There are strengths that could be highlighted for a variety of different systems. For example, remote sensing upscaling may have potential advantages in a contested environment, while direct sensing may have potential accuracy advantages.

The solicitation exempts 'early phase efforts in cost-effective proximity' from initial testing at the designated Polar Proving Grounds. For a multi-year, Firm-Fixed-Price proposal, is a local canonical alpine environment acceptable for a Phase I / Year 1 proof-of-concept milestone, provided subsequent option phases scale to a designated Polar Proving Ground?

There is no absolute standard here, but there is a strong preference toward conducting work at the Polar Proving Ground (PPG) sites. The exemption for local work is largely intended to give offerors sufficient flexibility to conduct shakedown tests near their home base so that they arrive at PPGs with tested and working equipment. Seeking alternative locations for canonical environment measurements would not really be in the spirit of this and may be viewed as less responsive. The scope and scale of the activities at the non-PPG site relative to the PPG site would be important in this evaluation. The government will be asking: are they collecting the key data or are they just making sure the system works?

Does the awardee (company or university) retain any intellectual property (IP) developed during the project? If not, how is the IP managed?

Intellectual property (IP) will be managed on a case-by-case basis during pre-award negotiations. In general, if the KTR brings IP to the table, then original IP from the KTR remains the IP of the KTR, unless it comes with GPR or other government rights. Advancements made to original IP and/or new innovations generated under this contract (i.e., paid for by government funds) may require shared government rights or other considerations. Determinations will be resolved during pre-award negotiations on a case-by-case basis if a proposal is selected.

In the case of in-situ validation, I would assume for locations involving hazards the awardee would not need to physically measure the site due to safety concerns.

Safety is always paramount. The government discourages any work that exposes personnel to undue risk and would negatively evaluate a reckless plan of work. However, the government is not ultimately responsible for evaluating the safety of proposed activities. Final risk management decisions lie exclusively with the offeror and their institution. This can be a delicate balance. Several of the goals of this program involve detecting hazardous conditions and all polar field work involves risk. One cannot travel to a Polar Proving Ground site without exposing a team to hazards. And it may be challenging to assess a method of detecting a hazardous condition, for example, without confirming the presence of the hazard. Much of the work of a polar field program involves careful risk mitigation and balancing the need for data with the risks to personnel.