

NSF SBIR/STTR Program Goal

The goal of the SBIR/STTR program is to promote the development of intellectual capital at small companies (500 or fewer employees). To this end, the NSF SBIR/STTR Program makes awards to small companies that

- Build upon recent discoveries in basic sciences and engineering
- Lead to development of new scientific, engineering, and education capability through commercialization of advanced instruments, new processes, and innovative software, etc.
- Promote partnerships among industry, government (state, local, Federal), and academia.

A Glimpse into the SBIR/STTR Merit Review Process at National Science Foundation (NSF).

Reviewers will consider the following criteria:

Criterion 1. What is the intellectual merit of the proposed activity? This criterion addresses the overall quality of the proposed activity to advance science and engineering through research and education.

- Is the proposed plan a sound approach for establishing technical and commercial feasibility?
- To what extent does the proposal suggest and explore unique or ingenious concepts or applications?
- How well qualified is the team (the Principal Investigator, other key staff, consultants, and subawardees) to conduct the proposed activity?
- Is there sufficient access to resources (materials and supplies, analytical services, equipment, facilities, etc.)?
- Does the proposal reflect state-of-the-art in the major research activities proposed? (Are advancements in state-of-the-art likely?)
- For **Phase II** proposals **only**: As a result of Phase I, did the firm succeed in providing a solid foundation for the proposed Phase II activity.

Criterion 2. What are the broader impacts of the proposed activity? This criterion addresses the overall impact of the proposed activity.

- What may be the commercial and societal benefits of the proposed activity?
- Does the proposal lead to enabling technologies (instrumentation, software, etc.) for further discoveries?
- Does the outcome of the proposed activity lead to a marketable product or process?
- Evaluate the competitive advantage of this technology vs. alternate technologies that can meet the same market needs.

- How well is the proposed activity positioned to attract further funding from non-SBIR sources once the SBIR project ends?
- Can the product or process developed in the project advance NSF's goals in research and education?
- Does the proposed activity broaden the participation of underrepresented groups (e.g., gender, ethnicity, disability, geography, etc.)?
- Has the proposing firm successfully commercialized SBIR/STTR-supported technology where prior awards have been made? (Or, has the firm been successful at commercializing technology that has not received SBIR/STTR support?)

Principal investigators should address these issues in their proposals so as to give reviewers the information necessary to respond fully to both NSF merit review criteria. NSF staff will give careful consideration to this information in making funding decisions. NSF considers that commercial potential can probably be best demonstrated by the small business concern's record of commercializing SBIR/STTR or other research. NSF will recognize the distinct issues faced by a new company, which does not have a track record as compared to an older, more seasoned operation. However, it is incumbent upon the proposer to make a persuasive case for the probability of commercial success.

Source: An excerpt from NSF's Information and Instruction website.