



KENTUCKY SCIENCE &
ENGINEERING FOUNDATION

KENTUCKY SBIR/STTR ASSISTANCE PROGRAM

- PHASE DOUBLE ZERO GRANTS -

Application Guidelines and Request for Proposals

OPEN

Contact

Dr. Mahendra K. Jain, KSEF Executive Director
Telephone: 859.246-3230, Email: mjain@kstc.com

Kentucky Science and Technology Corporation
200 West Vine Street, Suite 420
Lexington, KY 40507
www.ktsc.com

Revision Date: January 31, 2012

TABLE OF CONTENTS

1. INTRODUCTION.....	3
2. THE SBIR-STTR PHASE DOUBLE ZERO APPLICATION	3
3. ELIGIBILITY REQUIREMENTS	4
3.1 FEDERAL AGENCY REQUIREMENTS TO BE MET	4
3.11 SBIR Grants.....	4
3.12 STTR Grants.....	5
3.2 ORIGINALITY AND NUMBER OF SUBMISSIONS	5
4. APPLICATION PROCESS	5
5. PHASE DOUBLE ZERO APPLICATION OUTLINE AND CONTENT.....	6
5.1 COMPANY INFORMATION - SECTION A	6
5.2 UNIVERSITY/NON-PROFIT PARTNER INFORMATION – SECTION B	6
5.3 PHASE I AND PHASE II INFORMATION – SECTION C	7
5.4 PHASE II PROPOSAL DEVELOPMENT COSTS – SECTION D	7
5.5 ATTACHED DOCUMENTS.....	8
6. FUNDING REQUEST	8
6.1 ALLOWABLE USES OF SBIR/STTR PHASE DOUBLE ZERO FUNDS.....	8
6.2 UNALLOWABLE USES OF SBIR/STTR PHASE DOUBLE ZERO FUNDS:.....	9
7. TIPS FOR A SUCCESSFUL SBIR/STTR PHASE DOUBLE ZERO APPLICATION	9
8. APPLICATION EVALUATION AND SELECTION PROCESS	10
9. GRANT AWARD PROCESS	10
10. REVIEW OF THE PHASE II DRAFT	11
11. AWARD AMOUNT AND PAYMENT SCHEDULE.....	11
12. POST AWARD NOTIFICATION AND REPORTING	12
13. HYPOTHETICAL PHASE DOUBLE ZERO AND PHASE II TIMELINE	12
14. CONTACT PERSON	13

1. Introduction

In an effort to increase Kentucky small business participation in the federal SBIR and STTR program, the Kentucky Science and Engineering Foundation (KSEF) has developed a grant writing assistance program: the **Kentucky SBIR/STTR Phase Zero and Phase Double Zero** grants. The grants program is available to Kentucky’s small businesses, university-affiliated small businesses, and college and university faculty entrepreneurs. These funds are intended for the development of Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) proposals for submission to any of eleven participating federal agencies.

The goal of the KY SBIR/STTR Phase Zero and Phase Double Zero program is to increase participation in federal SBIR and STTR programs and improve success rates by providing a grant to develop and to prepare high-quality, competitive proposals.

The KY SBIR/STTR Phase Zero and Double Zero program is administered by KSEF, which is managed by the Kentucky Science and Technology Corporation (KSTC) and funded by the Commonwealth of Kentucky under a contract with the Council on Postsecondary Education.

2. The SBIR-STTR Phase Double Zero Application

The **SBIR/STTR Phase Double Zero** is a grant program available to Kentucky’s small businesses who have previously received a Phase I grant from a Federal Agency. The Phase Double Zero funds are intended for the development of Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) Phase II proposals for submission to any of the eleven participating federal agencies offering an SBIR/STTR program.

The **Phase II Grants** under the **SBIR and STTR programs** provide funds for the prototype development of technology prior to commercialization of the product or idea. Visit the websites listed below for the appropriate descriptions and guidelines relevant to your proposal.

Agency	Website
Department of Agriculture (USDA)	www.csrees.usda.gov/funding/sbir/sbir.html
Department of Commerce (DoC)	
NIST	www.nist.gov/tpo/sbir/index.cfm
NOAA	www.oar.noaa.gov/orta/
Department of Defense (DoD)	www.dodsbir.net/
DARPA	www.darpa.mil/sbir
DoD - Air Force	www.afsbirsttr.com/Portal.aspx
DoD - Army	www.aro.army.mil/arowash/rt/

DoD - Navy	www.navysbir.com
Department of Education (DOEd)	www2.ed.gov/programs/sbir/index.html
Department of Energy (DOE)	www.er.doe.gov/sbir
Dept. of Health and Human Services (NIH)	http://grants.nih.gov/grants/funding/sbir.htm
Department of Homeland Security (DHS)	www.dhs.gov/files/grants/gc_1247254058883.shtm
Department of Transportation (DOT)	www.volpe.dot.gov/sbir
Environmental Protection Agency (EPA)	epa.gov/ncer/sbir/
National Aeronautics Space Administration (NASA)	http://sbir.nasa.gov
National Sciences Foundation (NSF)	www.eng.nsf.gov/sbir

3. Eligibility Requirements

In order to qualify for a KY SBIR/STTR Phase Double Zero grant, the interested applicant must have previously received an SBIR/STTR Phase I on the topic proposed, must be located in Kentucky at the time of submission of the KY Phase Double Zero grant, AND the company must meet all the eligibility requirements of the particular federal agency to which the SBIR/STTR Phase II application will be submitted. The applicant company will be required to provide proof of “good” standing with the Kentucky Secretary of State as part of the Phase Double grant application.

Applicants seeking to submit a Fast Track SBIR/STTR proposal seeking support to develop their federal proposal should apply for a KY Phase Double Zero grant rather than a Phase Zero grant.

3.1 Federal Agency Requirements To Be Met

Examples of federal agency eligibility requirements for submission of the Phase II SBIR/STTR include but are not limited to the following:

3.11 SBIR Grants

1. Applicant must be American-owned to meet federal agency ownership/eligibility requirements.
2. Total number of employees of the parent company and its subsidiaries cannot exceed 500.
3. The applicant business has identified the project team from current employees and consultants or will have hired qualified team members before starting the grant work.
4. The principal investigator (PI) on the proposal is employed by the applicant small business for more than 50% of his/her time at the time of the federal Phase II award.
5. Partnership with an academic/non-profit organization is allowed but not required. The majority of the proposed work is to be conducted by the

applicant and not more than 50% of the dollar amount of the proposed work can be subcontracted.

3.12 STTR Grants

The eligibility requirements for the **Phase Double Zero STTR** are similar to those for a Phase Zero SBIR grant, with a few additions:

1. The principal investigator (PI) on a STTR grant proposal is either a **university faculty member or an employee of the small business as per the eligibility requirement of the federal agency and stated in the solicitation.**
2. The STTR application is submitted by the small business in **partnership** with one or two non-profit organizations, one of which must be a university.
3. **The small business must undertake a minimum of 40% of the work and the academic/non-profit partners must be responsible for a minimum of 30% of the work. Up to 30% of the work may be performed by a subcontractor including a small business, university and consultants.**
4. The small business **MUST** have a collaborative/partnership agreement with a non-profit institution as requested by the federal agency, including agreement on sharing the intellectual property.

3.2 Originality and Number of Submissions

The proposed idea in the KY SBIR/STTR Phase Double Zero grant proposal must be based on the federal SBIR/STTR Phase I award. Only one Phase Double Zero grant will be awarded to develop a specific SBIR/STTR Phase II proposal. An applicant (whether a business or a person) shall not receive more than three SBIR/STTR Phase Double Zero awards in one calendar year.

A Phase Double Zero proposal should be submitted independently for each targeted application. A maximum of \$4,000 may be awarded for the first grant and up to \$2,000 for each additional Phase Double Zero grant. The maximum award per year then would be a total of: \$4,000 for one grant, \$6,000 for two grants, and \$8,000 for three grants.

4. Application Process

Applications for Kentucky SBIR/STTR Phase Double Zero grants will be accepted all-year-round, but **must be submitted at least two months prior to the deadline of the federal agency** to enable KSEF to complete the review and the decision making processes as per the submission/review schedule (i.e. KSEF Submission Deadlines) published on the KSEF website. If a Phase Double Zero application is submitted to KSEF less than two months prior to the federal agency deadline, KSEF reserves the right to decline the application. Consideration will be given to applications targeting federal agencies that provide less than two months time from the issue date of the solicitation.

Applications must be submitted electronically through an online application form which can be found on KSEF website at <http://ksef.kstc.com>.

In addition to the electronic submissions, a scanned copy of the online application signed by the company officer (not a consultant or administrator) who can legally bind the organization to a contract must be emailed to KSEFPM@kstc.com.

All applications will be treated in confidence but are subject to an independent external review.

Receipt of each online application will be acknowledged. Applications with incomplete information may not be considered. Additional information may be requested of the applicant for clarification and responses must satisfy the KSEF Executive Director before the proposal is put before the review panel (see below).

5. Phase Double Zero Application Outline and Content

The Phase Double Zero application consists of four different sections requesting information pertaining to (A) the company that will be submitting and potentially receiving a federal grant; (B) the partnering university or other non-profit organization researchers, if applicable; (C) the federal **Phase II** application to be submitted; and (D) the KSEF Phase Double Zero funds requested.

For a detailed list of information needed to complete the Phase Double Zero application, see appropriate section at the end of this document.

5.1 Company Information - Section A

This section pertains to the company that will be submitting, and potentially receiving, a federal SBIR/STTR **Phase II** grant. Company contact information as well as business related details are requested in this section (i.e. number of employees, estimated annual revenue, etc.).

Information regarding the company's history in submitting and receiving Phase Double Zero, and Phase I or Phase II applications is also requested.

5.2 University/Non-Profit Partner Information - Section B

If the federal SBIR/STTR Phase II application to be submitted WILL NOT include a partnership with a non-profit (university or other), this section should be left blank.

If the Phase II application to be submitted WILL include a partnership (especially in the STTR **Phase II** proposal) with a non-profit (university or other), Section B **MUST** be completed. **ALL** information requested on Section B pertains to the partnering laboratory at the university or non-profit organization (not the company).

Information requested regarding the partnering laboratory includes the name of the university or non-profit organization, and the contact information of the researcher (i.e. Professor Jannie Doe at Kentucky University, Department of Physiology) who will be performing the technical tasks proposed in the federal **Phase II** application.

Previous experience of the partnering lab in submitting and securing SBIR/STTR proposals is also required. Note that federal SBIR/STTR **Phase II** awards are always made to a company. Thus, the partnering lab may have experience collaborating with several companies on their federal awards and for different federal agencies.

A description of the partnering laboratory is also required on the laboratory profile subsection. The description of the partnering lab's capabilities should be limited to those that best complement the work being proposed on the Phase I application.

5.3 Phase I and Phase II Information - Section C

Information requested in this section pertains to the **Federal Solicitation Request for Proposals** the applicant is planning to apply for. Although applicants may begin a Phase Double Zero application at any time (even before issuance of a specific federal solicitation), information on the federal solicitation must be included before its submission for review. The applicant is required to maintain contact with the Federal agency program manager prior to submission of the Phase Double Zero application and such information is required to be included in this section.

Information on the previously awarded Phase I, as well as the Phase II proposal is requested in Section C. Also requested are specific information on the Phase II proposal that is planned to be developed. The objective of the proposed work, the problem that the potential product / technology will solve, the innovation including related R&D and intellectual property already published in the subject, and the expected results. The project team, facilities and equipment available (or to be made available through a partnership) should be included in this section.

Briefly describing the **Phase II Work Plan**, the applicant must provide a glimpse of what will the Phase II proof of feasibility result and what needs to be achieved in Phase II to commercialize the technology in Phase III.

5.4 Phase II Proposal Development Costs - Section D

The KSEF SBIR/STTR Phase Double Zero grants are intended to help offset the costs of developing a competitive Phase II SBIR/STTR proposal. In-kind matching of the requested Phase Double Zero funds is expected. Personnel salary (lines 1 through 4) costs incurred for the development of the Phase II proposal represent the matching funds. Thus, the number of hours, the hourly rate and the total cost for each person listed on lines 1 through 4 **MUST** be provided. Under this section, the applicant is also required to describe direct costs foreseen in the preparation of the proposed SBIR/STTR Phase II proposal. A justification for each line item should be included. For a list of allowable costs, carefully review Section 6.1 of this document.

5.5 Attached Documents

In addition to the application information, the following three attachments must be included for both the SBIR and STTR Phase Double Zero submissions:

1. **Biographical information on the PI and other key personnel** (limit one page per person), uploaded in a single PDF file via the web application form;
2. **A letter of commitment from non-profit or public institution team members and collaborators** (this letter should be a signed statement of the individual's commitment to participate in the project, uploaded in a single PDF file via the web application form; and
3. **Proof of "good" standing with the Kentucky Secretary of State.** If the applicant desires to include additional charts/graphs to go with the project description, create one PDF containing the required proof of "good" standing *and* the other items, then upload as one PDF file on the web application as the third attachment.

6. Funding Request

Eligible applicants can request up to \$4,000 to defray any reasonable costs incurred in developing a SBIR or STTR Phase II proposal. A sum of \$1,000 of the award amount will be designated to pay an external service provider to review the complete final draft of the Phase II proposal. Should a second review be requested by the PI, \$500 will be deducted from the awarded amount and directly paid to designated external service provider. KSTC will designate an external service provider for this review and pay him/her directly for the services out of the grant. Only reasonable funds should be requested and receipts for incurred expenses should be saved. KSEF may request proof of incurred expenses for which Phase Double Zero grant funds may have been used.

6.1 Allowable uses of SBIR/STTR Phase Double Zero Funds

- Direct costs such as costs to gather information (e.g. literature search, patent search, market research, Commercialization Plan, etc.)
- Registration fee (not travel costs) for SBIR proposal writing workshops or Kentucky conferences
- The fees of external technical consultants, a technical writer, or a proposal reviewer to help develop a high-quality competitive proposal
- Travel (detailed justification required) to develop partnerships for the proposal; including travel to a Kentucky university for STTR proposal development
- Printing and supplies funds (max \$150)

Exceptions to these allowable costs will be considered on a case by case basis.

6.2 Unallowable uses of SBIR/STTR Phase Double Zero Funds:

- Indirect costs
- Purchase of equipment
- Salaries for individuals employed by the applicant company
- Salaries of the principal or co-principal investigators of the proposed project, including the individuals entered in Section A. Company information line #4, Section B. University/Non-Profit Partner Information line #4 of the online application, and Section D (line #1 through #4)
- Travel to meet with personnel from the Federal Agency for which the SBIR/STTR application is being prepared; or
- Travel costs to attend a SBIR/STTR workshop or a conference

7. Tips for a Successful SBIR/STTR Phase Double Zero Application

1. Be concise but thorough in responses. A typical well-written application is 10-12 pages *including* all attachments. To ensure data retention, click "save and refresh" frequently.
2. Provide the contact/PI data for the company officer/employee who can legally bind the organization to a contract, not a consultant or administrator.
3. Enter the company's physical/street address, not a post office box.
4. In the work plan, list the major milestones and completion dates for the *proposal development, not the milestones for the federal Phase I project.*
5. Include budget information for the cost of *proposal development*, not the project's budget. The total request may not exceed \$4,000 including the external review. A maximum of \$4,000 may be awarded for the first Phase Zero grant and up to \$2,000 for two additional Phase Zero grants in one calendar year; the same applies for Phase Double Zero grants per calendar year.
6. Upload the three required attachments in PDF format: (a) biographies, (b) letters of commitment and (c) proof of "good" standing with the Kentucky Secretary of State. Do NOT upload ZIP or DOC files, or submit information to KSEF via email.
 - a. Proof of "good" standing - The company's status/standing details may be accessible at <http://sos.ky.gov/online.htm> via "Organizational Search". Print to PDF and upload this proof of the company's "good" standing with the Kentucky Secretary of State onto the PZ-DZ application via the third "attached document." (Note: The proof of "good" standing is NOT the company's certificate of existence.)
 - b. If the applicant desires to include additional charts/graphs with the application, create one PDF containing the required proof of "good" standing *and* the other items, then upload as one file on the web application as the third attachment.
7. Proofread, finalize, and submit the application electronically. When submission is successful, the PI will receive an auto-generated email with PDF attachment of the completed application.

8. Print the completed Phase Double Zero application, have the application signed by the appropriate company representative, scan and email the document to ksefpm@kstc.com. The email subject line should include the Company Name and the term "Phase Double Zero Application Signed".

8. Application Evaluation and Selection Process

An independent, external review panel or external individual reviewers will review all the submitted proposals. The KSEF Executive Director will constitute the review panel with one or more representatives from academia, local and state governments, economic development agencies or other similar entities. The names of the reviewers will remain confidential. The review panel or reviewers will evaluate the proposals based on the following criteria:

1. Match between previously awarded Phase I grant, proposed Phase II grant proposal and company's existing and past business experience;
2. SBIR/STTR project, novelty, innovativeness and the proposed work plan;
3. End product for commercialization and identification of its customers and market;
4. Knowledge of related R&D and the existence of previous intellectual property;
5. Applicant's ability in resource development and utilization (people, facilities, budget);
6. Qualifications of the project team;
7. Facilities to conduct the proposed work;
8. Previous experience in SBIR/STTR application submission;
9. Phase III - Plan of commercialization; and
10. Impact of the innovative technology or product, size of the market and source of funds for commercialization in Phase III of the program.

The review panel will provide a recommendation to fund or not to fund with comments. Copies of the reviewer's comments will be sent to the applicant after a decision has been made on the application.

9. Grant Award Process

Based on the recommendations of the reviewers and other available information, the KSEF Executive Director will recommend to the KSTC President Kentucky SBIR/STTR Phase Double Zero grant awards for only those small businesses that demonstrate the ability to prepare a competitive SBIR/STTR federal agency proposal. Final action is determined by KSTC. After a complete application is received by KSEF, the applicant will be **notified generally within six weeks** whether or not the application was approved for funding.

10. Review of the Phase II Draft

After Phase Double Zero award notification, the applicant should send an electronic copy (word document) of the Phase II **complete final** draft proposal to the external service provider designated by KSEF/KSTC for **final** review. Awardee companies are strongly advised to not send a first draft of the proposal or pieces of the proposal to the designated external service provider for review. The critique of the draft with suggestions will be returned to the applicant from the external service provider within one week or as soon as possible.

11. Award Amount, Payment Schedule, and Duties

The maximum amount of the Phase Double Zero grant will not exceed \$4,000 for a single proposal and \$8,000 total for up to three proposals by a single business per calendar year. The following payment schedule, that includes two installments, will be applied to ensure development and timely submission of high-quality SBIR/STTR proposals:

- **First installment** - One half of the award amount (less \$1,000 for the review of the Phase II final draft by the external service provider) will be paid within **four weeks** after KSEF's receipt of the signed Phase Double Zero Grant Agreement. KSTC will pay \$1,000 directly to the service provider upon completion of the review.
- **Second installment** - The second half of the award amount (less any additional qualified deductible amount) will be paid within four weeks of receiving copies of:
 - A complete copy of the final SBIR/STTR Phase I Proposal; and
 - A copy of each attachment and exhibit (NOT internal links with a document); and
 - The accompanying cover letter or cover sheet to the federal agency (if applicable); and
 - Proof of receipt by the federal agency prior to or on the day and time of its deadline.

The required deliverables must be submitted no later than the end date of the Grant Agreement to qualify for payment of the second and final installment of the grant.

The payment of the award amount will be contingent upon signing of a grant agreement between KSTC and the applicant small business. The second installment of the award amount will not be paid if:

- The applicant fails to submit the Phase I proposal to the federal agency before the posted deadline; and/or
- The applicant submits the SBIR or STTR Phase I proposal to the federal agency without its review by the KSTC service provider; and/or

- The submitted application has not been accepted by the federal agency for review; and/or
- The submission to the federal agency occurs after the pertinent Phase Double Zero Grant Agreement has expired.

Also, the awardee company will have to return any awarded funds to KSTC should it decide not to submit, or fails to submit, a Phase I proposal within reasonable time, or because of other reasons as determined by the KSEF Executive Director.

12. Post Award Notification and Reporting

The applicant is required to inform KSEF on the outcome of the Phase II Application. After receiving notification from the Federal Agency, an e-mail with the following information should be sent to KSEF (drempfer@kstc.com):

Funding Outcome

- Not funded
- Funded

Funding Details

- Federal Grant/Reference number; and
- Awarding Agency; and
- Date Awarded; and
- Total Amount Awarded; and
- Performance Period and Duration; and
- Title of award.

In the future, an online reporting platform will be set up for applicants to report this information to KSEF on a scheduled basis.

13. Hypothetical Phase Double Zero and Phase II Timeline

Below is an example layout for a Federal Agency Due date of May 1. For actual deadlines contact the specific federal agency (see list on page 3).

Time Line	Example Dates	Applicant's Action
- 60 days	March 1	Submit Phase Double Zero application to KSEF online and e-mail a signed copy to KSEFPM@kstc.com at least two months prior to the Federal Agency's Phase I deadline
	March 2	Work on Phase I application
- 16 days	April 15	Receive Phase Double Zero award notification; sign and return one copy of the executed grant agreement to KSEF; send Phase I final draft to the external service provider for final review via email
- 7 days	April 22	Applicant receives critique back from the external service provider within one week of sending
Phase I Due Date	May 1	Submit final proposal to federal agency and send a copy of the complete application to KSEF

	May 15	A check for the first half of the grant, less the \$1,000 fee paid directly to the external service provider, will be sent within four weeks of the signing of the Phase Double Zero Grant Agreement
	June 1	A check for the second half of the grant (less any additional qualified deductible amount) will be sent within four weeks of KSEF's receipt of documentation of Phase I submission to the federal agency
	November 1	...or thereafter, notify KSEF of the outcome of the Phase I application

14. Contact Person

For clarifications on the above program, please direct your inquiries to:

Mahendra K. Jain, KSEF Executive Director
Kentucky Science and Engineering Foundation
200 West Vine Street, Suite 420
Lexington, KY 40507

Telephone: 859.246.3230

E-mail: mjain@kstc.com

Website: <http://ksef.kstc.com>