New NASA SBIR Program Initiatives for Post Phase II

Carol R. Lewis

November 18-20, 2014

Jet Propulsion Laboratory
California Institute of Technology

Mirror Technology SBIR/STTR Workshop
Albuquerque, NM

Overview

- Solicitation Release Information
- Opportunities for Continued Technology Development, Post-Phase II, that Include NASA SBIR Program Funds
  - Phase II-E
  - Phase II-X
  - Commercialization Readiness Program (CRP)
- Additional Information on Reauthorization, Policy Directives and Impacts
- NASA and JPL SBIR/STTR Points of Contact

NASA SBIR/STTR Solicitation Releases

- 2014 Solicitations
  - Released 11/14/2013 – Now Closed
- 2015 Solicitations:
  - Presolicitation posted in FedBizOpps, 10/31/2014:

    https://www.fbo.gov/?s=opportunity&mode=form&id=5c22ddcdd39236c47cb6f41fe7b31e27&tab=core&_cview=0

  - **2015 Solicitations Released by HQ 11/14/2014 (On schedule)**

    http://sbir.nasa.gov

- 2015 Solicitation front-end includes overview of opportunities for continued technology development, post Phase II.
- For details and updates, see this site (referenced in Solicitation): http://sbir.nasa.gov/content/post-phase-ii-initiatives

Opportunities for Continued Technology Development, Post-Phase II

Per the NASA SBIR/STTR public website
http://sbir.nasa.gov/content/post-phase-ii-initiatives

- The Program currently includes two initiatives for supporting small businesses past Phase I and Phase II.
  - **Phase II Enhancement (II-E) and Phase II eXpanded (II-X) contract options emphasize opportunities for commercialization and infusion.**
- The Program is exploring how to take advantage of the authority created by Public Law 112-81 (National Defense Authorization Act for FY'12, which included the SBIR/STTR Program Reauthorization) for civilian agencies to execute a Commercialization Readiness Pilot program for SBIR/STTR, and will soon post information on the abovementioned website.

- **There are, of course, other Post Phase II funding possibilities – but these three include NASA SBIR Program Funds.**

Purpose of the Phase II-E Option

- The II-E option is now in its 5th year ('07 Phase II companies were the first ones eligible).
- To further encourage advancement of innovations developed under Phase II, via extension of research and development (R&D) efforts underway on current Phase II contracts.
- **New work proposed under a Phase II-E must build upon and demonstrably advance R&D conducted during Phase II; should therefore lead to new outcomes not achievable with Phase II funding alone.**
- **Requires third party investment (co-funding). Eligible third parties include NASA projects, NASA contractors, other government agencies, or any commercial investor.**
- The non-SBIR/non-STTR contribution is not limited, since it is regulated under the guidelines for Phase III awards.

Reference: http://sbir.nasa.gov/content/post-phase-ii-initiatives

Purpose of the Phase II-X Option

- **The '12 Phase II companies will be the first ones eligible, in CY 2015.**
- To establish a strong and direct partnership between the NASA SBIR/STTR Program and other NASA projects undertaking development of new technologies or innovations for future use.
- Under a Phase II-X option, innovations developed in Phase II are to be advanced via an extension of R&D efforts to the current Phase II contract.
- Firms must meet two specific requirements to be eligible for II-X.
  - **Must secure a NASA program or project (other than NASA SBIR/STTR) as a partner to invest in enhancing their technology for further research or infusion.**
  - Must secure at least $75,000 in NASA program or project funding.
- The NASA contribution is not limited, since it is regulated under the guidelines for Phase III awards.

Reference: http://sbir.nasa.gov/content/post-phase-ii-initiatives

2014 General Solicitation: Post-Phase II Awards

Phase II-Enhancement (II-E)

Phase II-E	Minimum non-SBIR/STTR Funding Required for Eligibility for Matching in Phase II-E	Corresponding SBIR/STTR Program Contribution	Anticipated Period of Additional Performance
	$25,000	$25,000	6-12 Months
	Maximum non-SBIR/STTR Funding to be Matched by SBIR/STTR Program in Phase II-E	Corresponding SBIR/STTR Program Contribution	Anticipated Period of Additional Performance
	$125,000	$125,000	6-12 Months

Phase II-eXpanded (II-X)

Phase II-X	Minimum Funding Required from non-SBIR/STTR NASA Source for Eligibility for Matching in Phase II-X	Corresponding SBIR/STTR Program Contribution	Anticipated Period of Additional Performance
	$75,000	$150,000	12-24 Months
	Maximum Funding Amount from non-SBIR/STTR NASA Source to be Matched in Phase II-X	Corresponding SBIR/STTR Program Contribution	Anticipated Period of Additional Performance
	$250,000	$500,000	12-24 Months

Text courtesy of "Understanding the NASA Structure when it Comes to SBIR/STTR Funding", Gary Jahns and Luis Mederos, US Small Business Administration / National Council of Entrepreneurial Tech Transfer (SBA/NCET) webinar presented July 23, 2014 and available at http://center.ncet2.org/index.php?option=com_content&view=article&id=727

2014 Select Solicitation: Post-Phase II Awards

Phase II-Enhancement (II-E)

Phase II-E	Minimum non-SBIR/STTR Funding Required for Eligibility for Matching in Phase II-E	Corresponding SBIR/STTR Program Contribution	Anticipated Period of Additional Performance
	$25,000	$25,000	6-12 Months
	Maximum non-SBIR/STTR Funding to be Matched by SBIR/STTR Program in Phase II-E	Corresponding SBIR/STTR Program Contribution	Anticipated Period of Additional Performance
	$125,000	$125,000	6-12 Months

Phase II-eXpanded (II-X)

Phase II-X	Minimum Funding Required from non-SBIR/STTR NASA Source for Eligibility for Matching in Phase II-X	Corresponding SBIR/STTR Program Contribution	Anticipated Period of Additional Performance
	$75,000	$150,000	12-24 Months
	Maximum Funding Amount from non-SBIR/STTR NASA Source to be Matched in Phase II-X	Corresponding SBIR/STTR Program Contribution	Anticipated Period of Additional Performance
	$250,000	$500,000	12-24 Months

Slide courtesy of "Understanding the NASA Structure when it Comes to SBIR/STTR Funding", Gary Jahns and Luis Mederos, US Small Business Administration / National Council of Entrepreneurial Tech Transfer (SBA/NCET) webinar presented July 23, 2014 and available at http://center.ncet2.org/index.php?option=com_content&view=article&id=727

Phase II-E and Phase II-X Requirements

- Proposed work must be an integral and related part of the Phase II contract.
- To be eligible for matching funding, the investment must contribute to new enhancements or augmentations of the Phase II technology, as an extension or evolution of work to the contract. There should be reportable outcomes on the additional development of the technology.
- **Given the additional resources for Phase II-X, it is anticipated that Phase II-X options will yield greater results, such as technologies at significantly higher TRLs than Phase II or II-E.**
- Funding sources that do not count as matching investments:
  - Previously existing contracts, grants, or purchase orders.
  - In-kind contributions, such as labor.
  - A firm's internal investments.
- NASA will not pay for manufacturing.

Reference: http://sbir.nasa.gov/content/post-phase-ii-initiatives

Phase II-E and Phase II-X Application Process (2014)

- Firm must provide a proposal, a letter of commitment from the third party, and other documentation in order to receive Phase II-E or II-X funding.
- Detailed information regarding submission of a Phase II-E or II-X proposal will be included in Phase II contracts.
- Firms interested in either a Phase II-E or II-X option are requested to notify the NASA SBIR/STTR Program of their intent to propose in writing to ARC-SBIR-PMO@mail.nasa.gov by end of 13th month of performance of the Phase II contract. This notification is non-binding.

Reference: http://sbir.nasa.gov/content/post-phase-ii-initiatives

Qualifying for Phase II-E or II-X

- During Phase II, small business must submit **either a Phase II-E or II-X application (not both!)** via the Contract Administration and Closeout Electronic Handbook (EHB). Submittal window is specified in advance by NASA HQ.

- **'11 Phase II companies: eligible in 2014.**
- **'12 Phase II companies: will be eligible in 2015.**

From the Reauthorization Bill (H.R.1540) – Commercialization Readiness Programs

- **SBIR Civilian Agencies (Sect. 5123) – includes NASA.**
  - Pilot program – New. Up to 3 yr duration (per Sect. 5164).
  - **Agency head may allocate up to 10% of SBIR/STTR budget for awards for technology development, testing, evaluation and commercialization assistance for Phase II technologies; or to support progress of SBIR/STTR R&D and commercialization to Phase III.**
  - For highly promising technologies to substantially enhance Agency's mission.
  - Individual awards can be up to 3X the amount of Agency's Phase II individual awards.

Implementation choice and details are up to each Agency

CRP: Commercialization Readiness Program

- Goal: Enable infusion and/or commercialization endpoint
  - The objective of the NASA CRP is an infusion or commercialization, not an incremental improvement in technology maturation alone. Technology maturation w/o infusion or commercialization not in scope
- Award amount range: typically between $100K to $1.5M.
  - Higher amounts possible but unlikely
  - The CRP operates as a matching funding arrangement. The target is a 1:1 ratio (SBIR/STTR to non-SBIR/STTR funds).
  - Matching funds from other sources must be unencumbered, i.e., without constraints such as other dependency on other awards, proposals, budgetary uncertainties, etc.
- (Current) Process:
  - 2 page (equivalent) application *by NASA*
    - *Direct applications / proposals by companies not accepted*
  - Full STMP (SBIR/STTR Technology Maturation Plan) upon approval

Purpose of the CRP

- The CRP is intended to provide the bridge to infusion and commercialization for technologies which could not accomplish within other funding opportunities.
  - Technically, since it is a Phase III, it can occur at any point after a Phase I award, however, such instances will be very rare; most CRP awards will occur after a Phase II.
- Since the NASA SBIR/STTR CRP funds Phase III contracts, a NASA focal point is essential.
  - There is no direct solicitation to respond, therefore the activity must be initiated by NASA.
  - Direct applications or proposals by companies will not be accepted.

SBIR/STTR Technology Award Stages

Phase I

- General
- Select

Phase II

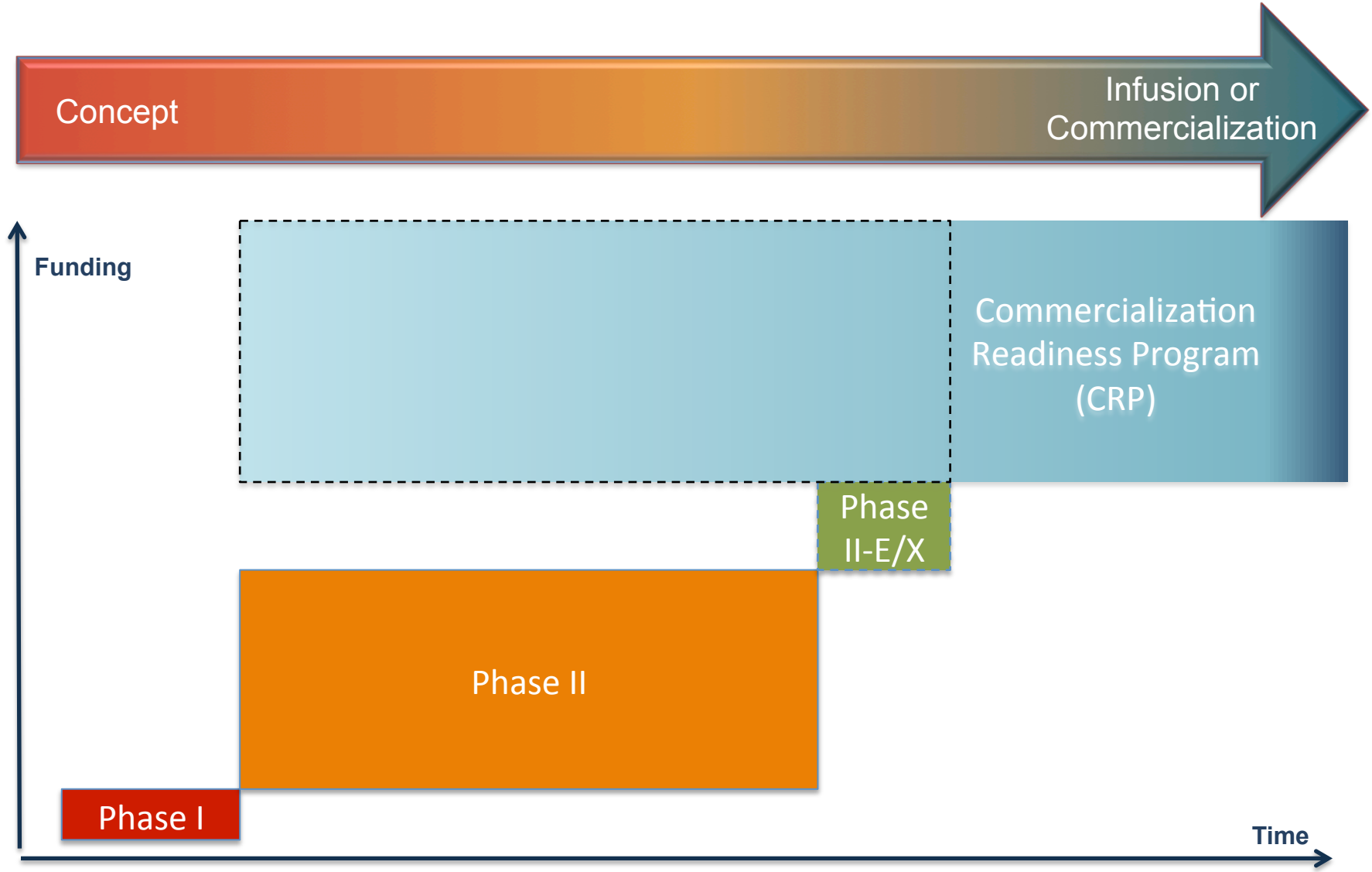
- General
- Select
- Phase II-E
- Phase II-X

Phase III

- Non-SBIR: Contract from NASA program or center
- SBIR: CRP

Slide courtesy of Luis Mederos, NASA SBIR Program Management and Operations, <luis.mederos@nasa.gov>

SBIR/STTR Technology Award Stages



Slide courtesy of Luis Mederos, NASA SBIR Program Management and Operations, <luis.mederos@nasa.gov>

Additional Information on Reauthorization, Policy Directives and Impacts

- SBIR/STTR Reauthorization Bill (H.R.1540) – Part of the National Defense Authorization Act for Fiscal Year 2012. Available via

  http://thomas.loc.gov/home/thomas.php *(search for H.R.1540 under 112th Congress)*
- SBIR and STTR Policy Directives

  http://www.sbir.gov/about/sbir-policy-directive (SBIR)

  http://www.sbir.gov/about/sttr-policy-directive (STTR)
- SBA Home Page

  http://www.sba.gov
- Official SBA News Blog

  http://www.sba.gov/community/blogs/official-sba-news-and-views/open-for-business
- Federal SBIR Official Website – All Agencies

  http://www.sbir.gov/
- NASA SBIR Home Page

  http://sbir.gsfc.nasa.gov/SBIR/SBIR.html
- Small Business Act

  http://www.sba.gov/content/small-business-act
- SBIR Gateway

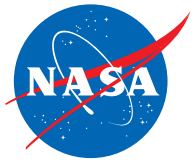
  http://www.zyn.com/sbir/

Establishing NASA SBIR Points of Contact

- We may communicate with companies about NASA/JPL SBIR/STTR needs, technical relevance, applications, technical subtopic details and clarifications, etc.
  - **The one exception is the Blackout Period (from Solicitation Release through Phase I Awards Announcement).**
  - During the Blackout Period we can discuss existing SBIR work as usual, and general NASA needs and interests not connected directly to the Solicitation.
  - **However - we cannot provide companies with any additional Solicitation details or clarification.**
- You are encouraged to contact us!
  - **If you do not already have NASA technical point(s) of contact, you can contact the SBIR Technology Infusion Manager (TIM) or the Field Center Program Manager at the desired Center(s)**.
    - http://sbir.nasa.gov/SBIR/pgminfo.htm
    - We can provide you with relevant leads and points of contact.

JPL SBIR Points of Contact

- Indrani Graczyk – Commercial Program/ SBIR Program Manager
  - Indrani.Graczyk@jpl.nasa.gov
- Byron Jackson – Administration
  - Byron.L.Jackson@jpl.nasa.gov
- Carol Lewis – Technology Infusion Manager
  - Carol.R.Lewis@jpl.nasa.gov
- Janelle Nguyen – Administration Support
  - Janelle.Nguyen@jpl.nasa.gov
- Rich Terrile – Operations Manager
  - Richard.J.Terrile@jpl.nasa.gov
- Debbie Wolfenbarger – External Communications
  - Debora.L.Wolfenbarger@jpl.nasa.gov



Jet Propulsion Laboratory
California Institute of Technology