



CUSTOMER MEMORANDUM ATTACHMENT 1.4 - SBIR DEFINITIONS & SUITABILITY RESOURCES

(Info only; do not include in Memo.)

Identifying Research, Development, Testing, and Evaluation (RDT&E) in SBIR/STTR Proposals

The definitions and criteria below govern SBIR/STTR as Research, Development, Test, and Evaluation (RDT&E) programs. These definitions and criteria implement 15 USC 638, the SBA SBIR/STTR Policy Directive (Oct 2020), and DoD Financial Management Regulation (FMR), Vol. 2A, Chapter 1, Section 0102, *Funding Policies* (June 2004, as amended). Subject to programmatic phase conditions, SBIR/STTR awards are made for research, development, test and evaluation (RTD&E) efforts.

PHASE I AND PHASE II CONDITIONS: Consistent with 15 USC 638 and Combined SBIR/STTR Policy Directive (2019), both Phase I and Phase II awards are aimed at furthering “scientific and technical merit and feasibility” of ideas in the proposals. The object of Phase I is to conduct feasibility-related experimental or theoretical research/research and development related to agency’s described broad or narrow requirements, as to determine the scientific and technical merit and feasibility of the proposed effort and the quality of performance of the offeror. The object of Phase II is to continue the research/research and development effort from the completed Phase I (or from prior non-SBIR/STTR research in case of Direct-to-Phase II award). Phase II also includes a Special Phase II Testing and Evaluation authority.

SCIENTIFIC AND TECHNICAL FEASIBILITY DETERMINATION IN ACCORDANCE WITH 15 USC 638(CC):

Direct-to-Phase II awards are conditioned upon the awarding agency’s determination that the offeror’s idea has sufficient scientific and technical feasibility and merit despite the lack of Phase I award.

RESEARCH OR RESEARCH AND DEVELOPMENT (R/R&D): Any activity that is: (1) A systematic study directed toward greater knowledge or understanding of the subject studied; (2) a systematic study directed specifically toward applying knowledge and innovation to meet a recognized but unmet need; or (3) a systematic application of knowledge and innovation toward the production of useful materials, devices, and systems or methods, including design, development, and improvement of prototypes and new processes to meet specific requirements. The term “research and development (R&D)” is intended broadly to include the work performed under a funding agreement with the government. It includes R&D in all fields, including the physical sciences, engineering, etc. **Research** is systematic study directed toward **fuller scientific knowledge or understanding** of the subject studied. **Development** is systematic use of **the knowledge and understanding gained from research**, for the production of useful materials, devices, systems, or methods, including the design and development of prototypes and processes.

Continued on Page 2

**TREATMENT OF COMMERCIAL OFF-THE-SHELF (COTS) AND NON-DEVELOPMENTAL ITEMS (NDIS):**

COTS/NDIS: Items purchased directly from a commercial source that can be utilized **without alteration through design and development, or without modification**, are classified as **COTS or NDI**. This includes, for example, ready-to-use products, training services, and software licenses for ready-to-use software to satisfy service needs, including Software as a Service (SaaS). **Purchases of COTS and NDIs for use, including the first article and associated first article acceptance testing and related minor adjustments** are not suitable for SBIR/STTR funding. The acquisition of commercial items or NDIs for testing and operational evaluation **that do not require RDT&E engineering, design or integration effort** will not be funded by SBIR/STTR funds. **However, if an end item requires design and development in order to accept the COTS or NDI**, funding for design and development effort could be funded by SBIR/STTR funds. If a COTS or NDI is required for RDT&E test purposes, the cost could be funded by SBIR/STTR funds.

MODIFIED COTS/MODIFIED NDIS: Commercially available items **that must be modified** to satisfy user requirements are classified as "**modified COTS**" or "**modified NDI**" articles. **In this instance, the first article, modification of the first article, and first article testing** could be funded by SBIR/STTR funds. Follow-on purchases will not be funded by SBIR/STTR funds. The number of "**modified**" **first articles** bought with SBIR/STTR funds will not exceed the quantity needed to conduct the RDT&E acceptance tests. **Modification** is technology refreshment that **significantly changes** the performance envelope of the end item. If the commercially available item **is modified and requires testing prior to approval** for service use or inventory, it may be funded by SBIR/STTR funds, as all developmental items. In contrast to modification, **continuous technology refreshment** is the intentional, incremental insertion of newer technology to improve reliability, improve maintainability, reduce cost, and/or add minor performance enhancement, typically in conjunction with depot or field level maintenance. The insertion of such technology into end items as part of maintenance is not funded by SBIR/STTR funds.

DEVELOPING COTS OR COMMERCIAL PRODUCT: If adapting a commercial product/process, what is the intended modification to the COTS or commercial product? Explain.

The offeror's proposal must also identify scientific and technical baseline based on relevant literature and describe the RDT&E efforts advancing this baseline. As part of the Direct-to-Phase II proposal, the offeror shall provide information to sufficiently enable the agency to make a scientific and technical feasibility and merit determination in accordance with 15 USC 638(cc). The Team discussion shall address qualifications for conducting RDT&E, as well as commercialization.

TIE TO DEFENSE ACQUISITION PROGRAM: In furtherance of 15 USC 638(y), the offeror must identify any Defense Acquisition Program to which the proposal is tied, if known. This information will be used to identify any resulting Phase I or Phase II award in the Federal Procurement Data System (FPDS). If this information is not known, the proposal shall so state.