White Paper Template

**AFFOA Project Call 1.0 Project Topic:**

**Project Title:**

**Project Keywords (up to five):**

**Lead AFFOA Member Applicant Organization: Name and location (city, state)**

**Lead AFFOA Member Applicant Principal Investigator or Project Point of Contact: Name, affiliation, address, email, phone**

**AFFOA Team Member Organizations: Name and location (city, state). Also, please complete Project Execution Table in Appendix A**

**Target Market(s) for product prototype: Automotive, Aerospace, Medical, Apparel, Materials, Consumer Products, Architecture (interior design, construction), Consumer Electronics, Data and Software, Electronic Components, Services and Systems, Equipment or Define Other**

**Current manufacturing capacity for fiber and fabrics with justification:**

**Expected manufacturing maturity and scaling plan at the conclusion of the project with justification:**

**Project Description (2-3 pages)**

**Please compose your response according to the following sections.**

1. **Prototype Description and Valuation: Proposed product prototype with graphic depiction, market specific use case, market needs addressed and evaluate total addressable market. Describe how the project supports AFFOA’s mission and creates a revolutionary fabrics or textile system as it compares to current state of the art. Describe how technology provides a value-added service. Describe if technology could be dual use for civilian and defense applications.**
2. **Technology and Manufacturing Innovation: Proposed technology innovation(s) and how it (they) represent advancements versus current manufacturing practice or incumbent technology. Specifically explain how the project addresses key Project Selection Criteria including each Manufacturing Thrust (Computer Aided Design of Integrated Textiles (CAD-**IT), **Fiber and Yarn Devices (FYD), Textile Systems and Assembly (TSA) and System Integration and Testing (SI)).**
3. **IP Listing and Management Plan: List existing IP protecting this technology or process and describe unique know-how required to produce and scale. Clearly mark any proprietary information disclosed and limit to amount necessary to convey value.**
4. **High Level Plan Beyond Year 1: Technology and manufacturing roadmap of improved and additional capabilities and scale enabled by this investment with future product implementations described.**

Work Plan (2-3-page maximum)

**The Work Plan should include a concise summary of:**

* **Project Deliverables, i.e. what will be delivered upon successful completion of the project (prototype along with specific data, design or manufacturing tools, etc.)**
* **High-Level Work Flow Structure, i.e. brief description of each of 3-5 major tasks and responsibility for each (to the extent possible, projects should utilize industry standards for conducting and reporting materials testing.**

**Budget Summary (not included in page count)**

**The budget summary should identify amounts and the source(s) of non-federal cost share (cash and In-kind) and the approximate annual allocations of cost share and requested federal funding to each high-level task for Year 1.**

**Appendix A. Project Execution Table**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Design/testing/modeling** | **Fiber and yarns** | **Fabric**  | **Assembly** | **System integration** |
|  |  |  |  |  |
|  |  |  |  |  |

**Appendix B. Core Competency Analysis Template (not included in page count)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Task** | **Who on your team is contributing this core competency?**  | **Core competency area (see list below)** | **Specific core competency**  | **Requires knowledge, hands-on skill, or both** | **Learning Content (existing or proposed)** | **Why is this relevant?**  |
|  |  |  |  |  |  |  |

**Example content**

**Core competency area:**

1. **Design, modeling, testing validation**
2. **Fibers and yarns**
3. **Fabrics**
4. **Assembly**
5. **System integration**