**[Attachment 1]**

**Technology Demand Survey for**

**Strategic Industrial Technology R&D Program(FY 2022)**

*(the survey should be preferably about 3 pages)*

**1. Applicant Category**

|  |  |
| --- | --- |
| **PD Survey Category** | **(PD Category) Related Technology Theme**  *ex.* (Carbon-nano) Carbon fiber composite manufacturing and application technology |

**2. Technology Overview**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Technology Title** |  | | | | | |
| **Applicant’s Information** | *(Name)* | | *(E-mail)* | | *(Office)*  *(Cell)* | |
| **Proposing Organization’s**  **Name and Country** | *ex. Seoul National University* | South Korea(○), (Specify a region & country)  Asia( Japan ), Europe( Germany)  America( US )  Others( ) | | | | |
| **R&D Type** | **Fundamental Technology Development** | ○ | | **Innovative Product Development** | |  |

**3. R&D Objectives and Core Technology**

|  |  |
| --- | --- |
| **R&D Objectives** |  |
| **Core Technology Components** | o  o |

**4. Need for Support/Grand and Competitiveness factor**

|  |  |
| --- | --- |
| **Need for International Coopertation R&D** | o  o  \* Specify a need for government support from market, technical perspectives. |
| **Competitiveness factor** | o  o  \* Specify the level of technology, maturity, and successful commercialization cases of proposing Organization(applicant) |
| **Indutrial R&D Trend and applicable industrial field** | o  \* focus on Korea and local industry environment and trend |

**5. Expected Effects**

|  |
| --- |
| o  o  \* Specify intended technological, industrial, social effects and impacts. |

**<Attachment 1-1>**

**□ Technology Readiness Level(TRL)**

|  |  |
| --- | --- |
|  | **Description** |
| **TRL 1.** | Scientific research begins translation to applied R&D  Scientific research begins to be translated into applied research and development. Examples might include paper studies of a technology's basic properties. |
| **TRL 2.** | Invention begins  Once basic principles are observed, practical applications can be invented.  Applications are speculative and there may be no proof or detailed analysis to support the assumptions. Examples are limited to analytic studies. |
| **TRL 3.** | Active R&D is initiated – Active research and development is initiated.  This includes analytical studies and laboratory studies to physically validate analytical predictions of separate elements of the technology. Examples include components that are not yet integrated or representative. |
| **TRL 4.** | Basic technological components are integrated to establish that the pieces will work together. |
| **TRL 5.** | Fidelity of breadboard technology improves significantly .  The basic technological components are integrated with reasonably realistic supporting elements so it can be tested in a simulated environment. Examples include “high fidelity” laboratory integration of components. |
| **TRL 6.** | Model/prototype is tested in relevant environment.  Representative model or prototype system is tested in a relevant environment. Represents a major step up in a technology's demonstrated readiness. Examples include testing a prototype in a high-fidelity laboratory environment or in simulated operational environment. |
| **TRL 7.** | Prototype near or at planned operational system.  Represents a major step up from TRL 6, requiring demonstration of an actual system prototype in an operational environment. |
| **TRL 8.** | Technology is proven to work.  Actual technology completed and qualified through test and demonstration. |
| **TRL 9.** | Actual application of technology is in its final form.  Technology proven through successful operations |