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| **Survey on Technology Demand** |

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| KEIT or Korea Evaluation Institute of Industrial Technology is a government-affiliated institution that delivers innovative R&D projects selected in accordance with the broader technology roadmap and industrial policy of South Korea  To that end, KEIT solicits opinion from the experts who lead industrial innovation in the industry, academy, and research field to enhance the economic and technological prospect of R&D projects  One major R&D project implemented by KEIT is a project, called ‘Materials & Components Technological Development’. Under this project, KEIT tries to support technological development of a promising materials and components that will lead to innovation in the materials and components industry and a stronger national competitiveness  If you have any idea concerning the project, please do not hesitate to send your idea via e-mail ([**jmrgem@keit.re.kr**](mailto:jmrgem@keit.re.kr)) until February, 24, 2014  KEIT welcomes any input from you since your innovative idea will contribute to the Korea’s R&D activities and its journey to becoming a technological powerhouse with a 4 million dollar GDP  KEIT wishes all the luck to your business  Thank you  2014. 1. 14  Chairman and President of KEIT |

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| **Instruction on Writing the Survey Form** |

**1. Overview** : The project up for technology survey is the following. Choose one area out of the following four projects to suggest your idea

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| **Project** | | **Period** | **Description** |
| **Core Materials** | 1. **Strategic core materials** | Seven years | ㅇ A R&D project with a prospect of 70% international market share and $300million revenue by 2020 |
| **Convergence Materials and Components** | 1. **Software-integrated Components** | Five  years | ㅇ Integrate software technology to traditional components to diversify functions and enhance their intelligence, reliability, and value. |
| 1. **SME-centered development** | Three  years | ㅇ Develop advanced materials like sensibility materials and light materials utilizing the technology owned by the SMEs  \* also include technologies concerning designing, manufacturing process, and evaluation of such materials |
| 1. **Investor-tied development** | Three  years | ㅇ A project developed in association with private investors to promote commercialization of the developed technology. |

\*You can find further information on the project in the reference material.

**2. Necessity of the Project** : make a case for the government contribution to develop a technology in terms of its impact on the economy and industry

**3. Goal and Content**

A. Goal : describe the goal of a project, which includes the technology level, capacity, functions, and quality in measurable terms.

B. Content : describe in detail the process and all the technologies involved in the technological development. The description should also contain the information on the specifications, capability, usage, and functions of the end product stemming from the developed technology.

**4. Technology Trend**

A. Technology Trend : refers to an analysis on the status of domestic and international research on the proposed technology, problems with the existing technology, and prospect of it after the project.

B. Competition Status : refers to a report on the rival technology that has a potential to compete with the proposed R&D project either domestically or internationally.

**5. Area of Application and Impact**

A. Area of Application : Identify any area or industry that may be affected by the technological development

B. Impact : Indicate an expected rise in revenues, competitiveness and market share as well as a prospect for domestic commercialization

**[Reference] Four Projects for Materials & Components Technological Development**

1. **Technological Development for Strategic Core Materials**

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| **□ Project Goal**  ㅇ Develop Core Materials with a prospect for market dominance but with a risk too high for private investment  \* Strategic Core Materials : Innovative materials that have a potential to take over 70% of the international market and create a revenue of $300 million by 2020  **□ Feature**  ㅇ An SME leads the project with 50% of the project’s funding coming from the government. Mandatory participation from the start by a corporation which intends to purchase the end product is required  **□ Budget and Period**  ㅇ About $1.4 billion per year for five years |

1. **Technological Development for Software-integrated Components**

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| **□ Project Goal**  ㅇ Develop components converged with software technology to be used in the automobile, shipbuilding, and electric and electronics industries as a source of the future growth  **□ Feature**  ㅇ An SME leads the project with 70% of the project’s funding coming from the government.  ㅇ Regular assessment on the validity of the R&D project and mandatory participation by a corporation which intends to purchase the end product are required  **□ Budget and Period**  ㅇ About $1.1 billion per year for five years |

1. **SME-centered Technological Development**

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| **□ Project Goal**  ㅇ Support the SMEs with technological development for the established or niche market to propel the SME to become a competitive entity with core technology  **□ Feature**  ㅇ Designation of the corporation which intends to purchase the end product as a participating organization at the beginning is required to enhance the product’s marketability and facilitate the process of making inroads into the market.  **□ Budget and Period**  ㅇ About $500million per year for three years |

1. **Investor-tied Technological Development**

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| **□ Project Goal**  ㅇ Develop components and materials that will boost the revenue, profitability and competitiveness of a company while improving the unfavorable balance of trade.  **□ Feature**  ㅇ Link a project with an investor institution which will evaluate the commercial value of a technology to enhance the marketability of the end products.  **□ Budget and Period**  ㅇ About $600million per year for three years |

**Survey on Technology Demand, 2014**

(‘Materials & Components Technological Development’, 2~3 pages)

**1.Proposal**

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| **Technology** |  | | | | | | | |
| **Organization** | **Name** | **Region** | | | **Type of Organization** | | | |
|  | Domestic  (Korea) | | ***(region)*** | Corporation |  | Enterprise of Middle Standing |  |
| SME |  | University | ***O*** |
| Government Organization |  | Laboratory |  |
| Association |  | Etc |  |
| International | | ***(nation)*** |
| **Field** | 1. Strategic Core Materials ( ) **②** SW-integrated Components( ) 2. SME-centered Project( ) **④** Investor-tied Project( ) | | | | | | | |
| **Technology Classification** | **Materials** | | Chemical(inc. textile)( ), Metallic( ),  Ceramic( ), Convergence( ) | | | | | |
| **Components** | | Automobile & shipbuilding( ), Machinery & robot( ),  Electric & electronics( ), Human Interaction( ) | | | | | |
| **Classification of Technology(Code)** | | | | | | | |
| *Upper - Middle - Lower ex. (IT) – (Telecommunications) – (Telecommunications System)* | | | | | | | |

**2. Description of the Project and its Necessity**

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| *Reasons for suggestion and necessity for the government contribution* |

**3. Goal & Content**

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| **Goal** | *List of materials, components, and module proposed for development*  *and their specifications* | | |
| **Content** | *Detailed description of the technology proposed for development* | | |
| **Period** | ( )year | **Budget(Gov. contribution)** | ( )billion won |

**4. Domestic and International Trend**

*An analysis of the technology level and trend in domestic and international markets, problems, and prospect*

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| **Domestic**  **Trend** |  |
| **International**  **Trend** |  |

**5. Areas of Application and Impact**

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| *List of areas or industries to be impacted by the technology proposed for development*  *and description of its impact*  *ex. Specific technology (automobile sash and display panel), its impact on revenues, competitiveness, market share, and commercialization, and a plan for investment* |

**6. Personal Information**

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| --- | --- | --- | --- | --- |
| **Name/position** |  | | | |
| **Contact** | TEL) |  | E-mail) |  |