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OPR: Public Relations Division, MSIT

Contact Information : Lee Chang-hwan(+82-44-202-4519), Kim Kwang-nyun(+82-44-202-6231)

MSIT Confirms Comprehensive Implementation Plan for 2023 R&D Project

The Ministry of Science and ICT (“MSIT”; Minister Lee Jong-Ho) announced that it held a Comprehensive Deliberative Committee Meeting for R&D Projects and confirmed a total investment of KRW 6.6726 trillion for the 『Comprehensive Implementation Plan for Science and ICT R&D Projects 2023』. The Plan allocates KRW 5.2418 trillion for the R&D budget in science and technology (S&T), and KRW 1.4308 trillion for the R&D in the ICT field, which is a 3.9% increase from the previous year’s KRW 6.4161 trillion.

※ From the MSIT’s total R&D budget of KRW 9.7761 trillion, the budget allocated for the operation of NST(National Research Council of Science & Technology) and other government-sponsored research institutes have been set apart.

Based on these achievements, the MSIT is set to provide this year a total of KRW 6.6726 trillion in the three major fields and ten investment directions of key focus, in order to take the lead in future key technologies and diffuse science and ICT into industry fields. Major investment areas are as follows:

First, the MSIT is going to expand investment to take the lead in future critical technologies. The Ministry will seek to secure super gap in strategic technologies such as system semiconductor and advanced biotech. At the same time, the MSIT will provide support to developing AI, 5G and 6G communications and other innovative digital technologies, as well as to the convergence and diffusion of innovative technologies in the economy and society. The MSIT will also give meticulous support to ensure success in the third launch of the Nuri rocket and the launch of KOMPSAT-7, the Korea Multi-Purpose Satellite.

Second, the MSIT will enhance the research foundation and capabilities. By newly establishing the Innovation Research Center (IRC) for the nationally essential strategic technologies and the “Digging One Well” basic research program that provides young researchers a stable research environment, the Ministry will enable autonomous and strategic basic research. Nurturing key talent in national strategic technologies such as semiconductor, space, and AI will be pursued at the same time. Also, the MSIT will expand investment in the development of the Supercomputer 6 and the establishment of foundry manufacturing of low-power compound semiconductors to build key infrastructure for research.

Third, support for the diffusion of science and ICT into the field will be strengthened. Core carbon-neutral technologies, such as solar cells and carbon resource utilization, will be advanced, and new mega-projects will be launched to promote R&D innovation led by regions. The MSIT also plans to enhance public R&D for addressing social issues. In particular, the Ministry will push for the development of digital inclusion technologies converged with ICT, and new R&D projects for disaster response measures that meet the demand from the field (e.g., skyscraper fire extinguishing technology)

will be carried out. Additionally, the government plans to support the growth of digital innovation companies by supporting the development and commercialization of new products and services from ICT companies based on market demand and by fostering promising ICT startups.

To support these efforts, R&D procedures will be improved. Firstly, in the field of science and technology, large-scale research facility projects will be regularly reviewed to ensure the predictability of planning. Every six months (March and September), the demand for large-scale research facilities from local and research institutions will be surveyed, and based on this, planning and the feasibility of new projects will be reviewed. Additionally, to respond promptly to planning demands in future promising technology fields, the planning RB* will be more widely utilized.

* Review Board (RB) members who work on a half-time basis for four days a week, whose main function is to do planning works.

In the field of information and communication, a market demand survey (from companies, public institutions, etc.) will be introduced during the task planning stage to ensure that R&D achievements can quickly lead to private investment and commercialization. Additionally, to ensure the fairness and objectivity of planning, planning committee members will be selected through a planning selection committee, and an evaluation committee composed of top experts will be established to enhance the professionalism and fairness of the evaluation.

In accordance with the recently confirmed comprehensive implementation plan, the Ministry of Science and ICT announced the schedule for new projects and tasks on January 2. The MSIT will provide more specific details on the content, date and procedures of project exhibition through a joint ministry briefing on the government R&D project (on January 3, Tuesday) that will be broadcast live both online and offline.

During the Comprehensive Deliberative Committee Meeting for R&D Projects, S&T experts discussed and presented ways to enhance the innovative nature of R&D. The discussions focused on policy directions to i) turn from a chaser into a leader in the S&T innovation, ii) enhance excellence by doing away from distributing projects among a particular group with special benefits, and iii) lay a cornerstone for developing new technologies and entering new markets.

The main directions presented in the meeting are as follows. First, R&D projects that challenge limits will be launched in full swing. The MSIT will push for high-risk, high-value R&D programs to develop innovative technologies that will be the bread and butter for Korea 10 to 20 years later. Second, the Ministry will focus on the development of key strategic technologies. Among the 12 Critical and Emerging Technologies, six will be selected as key strategic technologies and one foundational technology commonly required in all of them will be selected to provide them intensive support.

< Six Critical Technologies and One Foundational Technology >



Third, the MSIT will actively secure top-tier talent. The Ministry will support the growth of researchers to become world-class scholars and expand support for attracting outstanding overseas researchers. Fourth, the government will provide intensive support to the explosive diffusion of research achievements. The Ministry will strategize the innovation ecosystem to enable research achievements to spread to the region and industry. Fifth, the MSIT will improve the research management and evaluation system to support these efforts.

In the field of ICT, Comprehensive Deliberative Committee received a report on various projects including ICT & broadcasting technology development and standardization support projects, talent development projects, and infrastructure and commercialization support projects for the year 2023. They discussed concentrating limited research and development resources on digital innovation technology, introducing research and development methods centered on the industry and researchers to maximize their achievements, and developing effective digital talent training plans.

Beginning with this Comprehensive Deliberative Committee, the Ministry of Science and ICT will continue to gather opinions from the research field on policy directions, and based on these opinions the Ministry will flesh out the detailed implementation tasks."

For further information, please contact the Public Relations Division (E-mail: msitpress@korea.kr) of the Ministry of Science and ICT.