



Promote Social Implementation to Realize Science and Technology Innovation

Toward Society 5.0 through collaboration among industry, government and academia

SUDO Akira

Fellow, Toshiba Corporation
Policy Advisor of Cabinet Office, Executive Director in Charge of SIP

SIP, Cross-ministerial Strategic Innovation Promotion Program, was established with the aim of realizing science, technology and innovation. The second period that started in 2018, is in its fourth year, and efforts are underway to achieve the R&D goals by the end of FY2022, as well as to implement the results in society after that. We interviewed SUDO Akira, the Executive Director in charge of SIP, about the current status and future prospects of SIP that promotes various issues through collaboration among industry, government and academia.

Realize end-to-end Society 5.0 through collaboration among industry-government-academia

Q: First of all, please tell us the features of SIP.

SUDO Akira Executive Director (ED): SIP is characterized by the fact that industry, government, and academia collaborate end-to-end to promote R&D in cross-sectional fields over government ministries and agencies, from the basics to practical application and commercialization. Therefore, issues handled by SIP are difficult to solve only by one company, then, collaboration with other companies, related ministries and agencies, and academia becomes essential. In this way, because SIP can bring together the strengths of Japan as a whole, I believe that it is also greatly anticipated from the industrial world. In the first period, I myself was involved in SIP from the industrial side and highly appreciated it.

SIP is an initiative toward realization of Society 5.0, aiming at the development of technology to integrate cyberspace and physical space, as well as at R&D activities and social implementation to solve various social issues.

SIP Second Period will end in 2022

Q: How is the progress of the second period?

ED: The second period of SIP started in the last year of the first period, and there was a year-long overlap, so there were some difficulties in collaboration. Since then, we have conducted a thorough global benchmarking for each theme, clarified what we should do, and made research plans based on that. After three and a half years, we have made technical achievements in all the themes. In the remaining period, we intend to implement these results in society.

6th STI Basic Plan

Social implementation by utilizing "Convergence of Knowledge"

Q: The 6th Science, Technology, and Innovation Basic Plan (hereinafter referred to as "6th STI Basic Plan") approved by the Cabinet in 2021 includes the concept of "social implementation by utilizing convergence of knowledge". How will SIP change?

ED: Since the concept of "social implementation by utilizing convergence of knowledge" was introduced in the 6th STI Basic Plan, the process of social implementation, which is the purpose of SIP, was more clarified.

While the SIP efforts have been mainly technology-oriented and have produced technical outcomes so far, they have not been sufficient somehow in terms of exploring concrete measures to implement them in society. In the future, SIP will utilize "convergence of knowledge" by combining the knowledge of technology with human studies and social sciences and asking the following questions: "Is this technology really beneficial to the world?" or "How it can be used by the world?" from various perspectives to promote the social implementation of technological achievements.

Since R&D progresses from basics to applications, you have to wait a certain period of time to see social implementation achieved, and the required time varies depending on the themes. Therefore, in SIP, we create a roadmap for each theme, evaluate it every year, and review the R&D plan based on the evaluation to achieve social implementation.

Started to consider next period of SIP

ED: We have started to discuss the next SIP. Regarding the system itself, we looked back on the first and second periods to examine whether there was a more effective and efficient way and also began to discuss specific themes. We have received many candidate themes from ministries, academia, and industry, and we will organize and submit them to the governing board for decision.