

Society 5.0¹ Envisioned on the Frontispiece

<What is Society 5.0?>

Society 5.0 is a concept proposed in the 5th Science and Technology Basic Plan (adopted by the Cabinet Decision in January 2016) as a future society that Japan should aim to achieve. It is a new society following the hunter-gatherer society (1.0), agricultural society (2.0), industrial society (3.0), and information society (4.0), which is defined as “a human-centered society in which economic development and the resolution of social issues are compatible with each other through a highly integrated system of cyberspace and physical space.”

“Fusion of cyberspace and physical space” means accumulating diverse data in physical space and storing it in cyberspace (e.g., supercomputers) using advanced ICT², conducting advanced analysis and making predictions and decisions on various elements of society through simulations in cyberspace using AI³, and reflecting the analysis results in physical space. Through this cycle between cyberspace and physical space, we aim to change our society into a better “human-centered society.”

<Vision for the future society for which Japan aims as Society 5.0>

It is a pressing issue to ensure the safety and security of the people against threats posed by COVID-19, large-scale disasters such as the Great East Japan Earthquake, and global warming. In addition, people's values have been changing in recent years as they emphasize well-being and contribution to the nation and the world not limited to pursuing wealth. In the 100-year life society, there is a call for an environment that enables people to participate in society throughout their whole lives.

Against this background, the 6th Science, Technology, and Innovation Basic Plan (adopted by the Cabinet Decision in March 2021) describes the vision for future society for which Japan aims as Society 5.0 more specifically: a “society that is sustainable and resilient against threats and unpredictable and uncertain situations, that ensures the safety and security of the people, and that enables each and every one of them to realize well-being.”

The concept of this future society is envisioned on the frontispiece in an easy-to-understand manner. As expressed here, we aim at achieving “a society that is sustainable and resilient against threats and unpredictable and uncertain situations, that ensures the safety and security of the people, and that enables each individual to realize well-being.” through the “fusion of cyberspace and physical space” using the most advanced science and technology and based on the value of a “human-centered society.”

<Initiatives required in order to realize Society 5.0>

In order to realize Society 5.0, it is necessary to develop and implement in society basic technology that enables the “fusion of cyberspace and physical space” and promote research and development that ensures sustainability of the earth and resilience of society.

Furthermore, in order to create a new society and values for Society 5.0 while tackling complicated social issues such as a declining birthrate, an aging population, and depopulation, we need “Convergence Knowledge (So-Go-Chi),” or creating revitalization in knowledge through the comprehensive use of diverse knowledge, including the “knowledge” in the natural sciences and the “knowledge” in the humanities and social sciences.

¹ This is a partially revised version of the frontispiece on the White Paper on Science, Technology and Innovation 2021.

² Information and communications technology

³ Artificial intelligence