Conclusion

This is the 50th edition of the White Paper on Science and Technology, the first of which was published in 1958.

In 1956 the Science and Technology Agency was established in Japan to be in charge of the promotion of S&T in general. In March 1958, the first edition of the White Paper on Science and Technology was published with the following statement: “Japan has recovered from the damages of World War II and has achieved the revival that we enjoy today, and in order to ensure further growth of Japan in the future, S&T is greatly expected to advance … I believe that understanding the situation of S&T in Japan and proposing long-term policies for the promotion of S&T is what the Japanese public expects, so that necessary measures for today.” (in the preface by Matsutaro Shoriki, Minster of State, Director General of Science and Technology Agency).

In August 1957, one year prior to the first version, the nuclear reactor JRR-1 at the Japan Atomic Energy Research Institute (then) went critical to generate nuclear electricity for the first time in Japan, and in November, the Japan Atomic Power Company was established to introduce a nuclear reactor on a commercial scale, for electricity generation in the private sector. Those days were literally the dawn of nuclear power in Japan. Now, 50 years later, Japan has to deal with the unprecedented massive disaster of the GEJE, and S&T in post-earthquake Japan have become an important issue.

Today’s wealthy lives would not be possible without the benefits of S&T. S&T will also be what helps the recovery of damaged areas and drives the rebirth of industries and expansion of employment. Furthermore, S&T is also expected to play a role in the decontamination of the areas polluted by radioactivity, in securing people’s health and in safely proceeding on the long road to the decommissioning of reactors at TEPCO Fukushima Daiichi NPS.

Triggered by the GEJE, Japan once again recognized the existence of vulnerability that threatens the safety and of the Japanese public, such as energy, food, infectious diseases and cyber crimes in addition to natural disasters. Although great earthquakes and massive tsunamis will hit Japan sooner or later, we must build a nation that can minimize the damages, by sufficient preparation for future disasters so that society can quickly recover from such damages with strong determination not to let tremendous number of people die in vain. If we can build such a nation, then we can believe that we have truly overcome the tough time caused by a massive disaster believed to occur only once in a thousand years.

The lessons learned from the GEJE are also a valuable asset for humanity as a whole. As a damaged nation, establishing the process to overcome various problems revealed by the earthquake and sharing the process with the world are also critical challenges to Japan.

This White Paper aims to play such a role.