

**Proactive and Strategic Space Development & Utilization
-For Economic Growth and Security & Safety-**

Keidanren

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Abstract (tentative translation)

1. We are now living in a “century of data.” Data is a “fuel” of economic growth. Space has unparalleled advantages in collecting and distributing data globally. Japan should promote more proactive and strategic space policies and actions to accelerate economic growth and to provide security and safety.
2. Both public and private sectors should play leading roles to promote space development and utilization. The Japanese businesses, regardless of their sizes and operational experience, should exercise their entrepreneurship to expand business frontiers in space.
3. The Japanese government should become the “lead user” of space; developing and applying various ways and means of space utilization to achieve missions relevant to their government ministries. To provide tangible and important benefits for the nation, the government should;
 - (1) Present a clear philosophy of Japan’s space development and utilization and embody it in the next Basic Plan on Space Policy.
 - (2) Redefine the objectives and frameworks of collecting and utilizing government satellite data to provide user-friendly services.
 - (3) Build institutional and technical foundations to promote inter-ministerial usages of government satellite data.
 - (4) Utilize and invest in new technologies and timely update regulatory frameworks to promote innovation.
 - (5) Ensure Japan’s autonomy to fully utilize advanced technology and the satellite data for its national security space programs.
 - (6) Secure timely and efficient use of satellite data by the central and local government agencies to predict and respond to natural disasters.
4. The Japanese government should encourage the private sector to fully exercise its vitality and entrepreneurship to develop space businesses. In this context, the government should;
 - (1) Improve regulatory and institutional environment to encourage new

businesses.

- (2) Secure seamless and easy access by the private sector to various government satellite data.
 - (3) Encourage Japanese companies to take high-risk space projects through enhanced assistance by government-affiliated financial institutions.
 - (4) Improve launch complexes, launch pads, and R&D facilities.
5. Japan should play a leading role in promoting international cooperation of space utilization. Especially, the Japanese government should;
- (1) Build up stronger cooperation with the United States through fully utilizing Japan's industrial and technological capabilities. In this sense, the two government should draw up a comprehensive road map for a truly win-win strategic space cooperation.
 - (2) Promote capacity building assistance and equipment cooperation towards East Asian and Oceanian countries to realizing Japan's strategic vision of a "Free and Open Indo-Pacific."
6. Any space program is required today to produce economic benefits directly or indirectly. The Japanese government, therefore, should encourage companies' active participations in space-related activities and projects to expand corporate investments. JAXA can facilitate such activities through setting research themes with an eye to develop them into future commercial businesses and transferring JAXA's various activities to the private sector.
7. Japan should maintain and further advance key space technologies at an internationally competitive level. To this end, the government should;
- (1) Initiate and promote strategic R&D programs, such as one to meet disruptive changes towards satellite communication technologies and constellations, which require mass production capabilities and autonomous operation technologies.
 - (2) Make an appropriate commitment to future procurement to encourage corporate investment and promote further technological development (e.g. Continue and prioritize use of Japan's flagship launch vehicles for satellite missions planned and conducted by relevant ministries of the government).