Regeneration Technologies for Human Space Activity - Introduction of ECLSS Technologies in the World -

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In 2004, the U.S. President George Bush announced the U.S. New Space Policy. Other nations including Japan were compelled to respond to the Policy and started discussion on their own long-term policy. On April 2005, JAXA released its long-term vision JAXA 2025. The vision includes the roadmap toward 2025 in the area of manned space activity.

Life-support-system technology is considered as one of the potential key technologies for these activities. Preceding the vision, the Institute of Aerospace Technology of JAXA initiated a discussion on the future possibility of Japanese life-support-system technology in 2004. This paper is intended to introduce the worldwide discussion around the U.S. New Space Policy focusing on JAXA's future plan and also newly emerging trend.