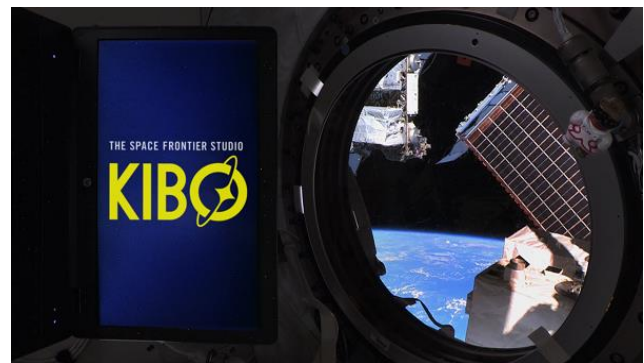


Participation in JAXA's "Feasibility Study for Sustainable Space Environment Utilization in Low Earth Orbit"

Kanematsu Corporation
 Tokio Marine & Nichido Fire Insurance Co., Ltd.
 Japan Airlines Co., Ltd.
 Bascule Inc.
 Baker McKenzie
 Mitsubishi Heavy Industries, Ltd.
 Mitsubishi UFJ Research and Consulting Co., Ltd.
 MUFG Bank, Ltd.
 Sierra Space Corporation
 Blue Origin, LLC.

Kanematsu Corporation, Tokio Marine & Nichido Fire Insurance Co., Ltd., Japan Airlines Co., Ltd., Bascule Inc., Baker McKenzie, Mitsubishi Heavy Industries, Ltd., Mitsubishi UFJ Research and Consulting Co., Ltd., MUFG Bank, Ltd., Sierra Space Corporations, and Blue Origin, LLC. were selected by Japan Aerospace Exploration Agency (JAXA) on "Feasibility Study for Sustainable Space Environment Utilization in Low Earth Orbit".

This consortium will engage together to incubate a new commercial space economy in the low earth orbit (LEO) as a purpose of the smooth transition from International Space Station (ISS) including Japan Experiment Module (JEM) as known as "KIBO" to a new commercial LEO Destination. In the study, the consortium will consider the entire business models in transportation both cargo and crew, the space utilization, and the return to the earth. The consortium will also consider the business model of crew transportation service in Japan.



Left: Aiming to establish a new eco-system centered on the low earth orbit (image)

Right: Example of space utilization: SPACE FRONTIER STUDIO KIBO (credit: Bascule Inc.)

In the US, commercial LEO activities are getting popular and there are several companies who have already worked on Commercial LEO Free Flyer program led by NASA. The US companies like Sierra Space and Blue Origin are leading the discussions how to transfer from ISS to the commercially owned new LEO destination.

In Japan, there is still ongoing discussion about ISS extension after 2025. The consortium will, however, proactively investigate to incubate new businesses in LEO destination to enhance new companies coming in this field potentially solving the social issues and generating innovation under the contract with JAXA.

1. Summary of this study:

- (1) To consider how to participate in the new LEO destination
- (2) To consider the business model of space utilization
- (3) To identify the current milestone, barriers and challenges, and to propose the solutions
- (4) To propose measures to do demonstration in JEM “KIBO” to achieve the smooth transfer
- (5) To consider the business model of crew transportation in Japan

2. Responsibilities

Kanematsu Corporation	<ul style="list-style-type: none"> ➤ Prime project management ➤ To consider entire business model on LEO destination
Tokio Marine & Nichido Fire Insurance Co., Ltd.	<ul style="list-style-type: none"> ➤ To identify challenges and barriers in LEO destination and crew transportation service in terms of risk assessment and insurance
Japan Airlines Co., Ltd.	<ul style="list-style-type: none"> ➤ Conduct a study on business viability ➤ Consider and propose a business model for human space flight in Japan
Bascule Inc.	<ul style="list-style-type: none"> ➤ To consider new space utilization service
Baker & McKenzie	<ul style="list-style-type: none"> ➤ To identify challenges and barriers in LEO destination and crew transportation service in terms of regulations and law
Mitsubishi Heavy Industries, Ltd.	<ul style="list-style-type: none"> ➤ To consider the business model of cargo transportation and crew launch
Mitsubishi UFJ Research and Consulting Co., Ltd. / MUFG Bank, Ltd.	<ul style="list-style-type: none"> ➤ To provide insights on business model and documentation ➤ To provide financial advice as a comprehensive financial Group
Sierra Space Corporation	<ul style="list-style-type: none"> ➤ Supervise the activities ➤ To provide the information of Orbital Reef and spaceplane Dream Chaser
Blue Origin, LLC.	<ul style="list-style-type: none"> ➤ Supervise the activities ➤ To provide the information of Orbital Reef