## Outline of the Basic Agreement

The Basic Agreement specifies essential matters such as roles of JAXA and IA during the development and operational stages. The main goal is to establish a framework which enables the private business operator IA to independently expand its launch service business using the Epsilon S Launch Vehicle, as well as to transform Japan's space transportation system into an independent and sustainable business structure by maintaining and advancing the space industrial basis.

While JAXA oversees the development of overall systems (rocket system and launch facility system) for the Epsilon S Launch Vehicle, the private business operator takes initiatives in the development of the rocket system with a viewpoint to independently advance launch service business using the Epsilon S Launch Vehicle.

The basic concept of roles of JAXA and the private business operator specified in the Basic Agreement are described in the following table:

	JAXA's Responsibilities	Private Business Operator's Responsibilities
Development Stage	To oversee the "overall systems" that	To take initiatives in the development of the
	integrates the rocket system and the launch	rocket system with a viewpoint to
	facility system in order to ensure Japan's	independently expand launch service
	independent space transportation system,	business during the operational stage.
	and to maintain and utilize JAXA's existing	
	technologies & rocket technical base at	
	launch facilities.	
Operational Stage	To contribute to the advancement of launch	To expand the launch service business in
	service business by the private business	light of making contribution to maintaining
	operator. And to achieve this by maintaining	and improving Japan's industrial base. And to
	technical base of Japan's solid-propellant	achieve this based on "self-governing
	rocket and its key technologies, by	policy" to deal with rocket quality & design
	promoting the research and development,	improvements, and to take appropriate
	and by transferring these achievements to	measures against nonconformances and
	the private business operator.	parts/material shortages, etc.

[Basic Agreement Signing Ceremony]

JAXA President Hiroshi Yamakawa and IA President Takashi Makino signed the Basic Agreement during the ceremony held at JAXA's Tokyo Office on June 11, 2020.



Signing the Basic Agreement@JAXA
(JAXA President Yamakawa (left), IA President Makino (right)



<u>JAXA</u>

President YAMAKAWA (3rd from the left)
Vice President FUNO (2nd from the left)
Project Manager, Epsilon Rocket Project Team
IMOTO (far left)

<u>IA</u>

President MAKINO (3rd from the right)
Director TAMURA (2nd from the right)
General Manager, Space Launch Systems
Engineering Dept. NAGAYAMA (far right)

[Remarks on the Basic Agreement Conclusion]

## JAXA President Hiroshi Yamakawa:

"Today, IA President Makino and I have signed the Basic Agreement on the development and operation of the Epsilon S Launch Vehicle which would strengthen our international competitiveness. I am very delighted to take this vitally important step forward in laying a series of foundations for transferring the Epsilon S to the private business operator so that they would further expand the launch service activity.

In the recent expanding satellite launch market, due to its rapidly rising space business sector resulting from the technology evolution of miniaturization and integration, the launch demand is on an upward trend for satellites with various mass, size and applications.

This Epsilon S Launch Vehicle will ensure launch opportunities for the Japanese government and will actively incorporate private sector's demands while maintaining and expanding our solid-propellant rocket system technology. JAXA, in collaboration with IA, will continue our efforts to expand IA's independent launch service business as well as broaden the scale of Japan's space industry. JAXA would appreciate your continued support."

## IA President Takashi Makino:

"It's indeed a pleasure for me to sign with JAXA the Basic Agreement. I'd like to express my cordial appreciation to all the people who have supported us.

From now on, IA will establish our operational framework in all the phases, from developing the Epsilon S launch vehicle to cultivating new customers and launching satellites. There are many new businesses rising as new players are emerging in the world. We will foster Epsilon S's launch service into an independent and sustainable business by receiving further launch orders from the commercial market in addition to providing once-a-year launch for the government.

The demonstration flight of the Epsilon S is scheduled for 2023. Meanwhile, there are still rocket launches planed for the current version of the Epsilon. We are deeply committed to the successful launches and will make our utmost efforts with JAXA in order to spur the growth of the Epsilon S's launch service. We look forward to your continued support for our activities."