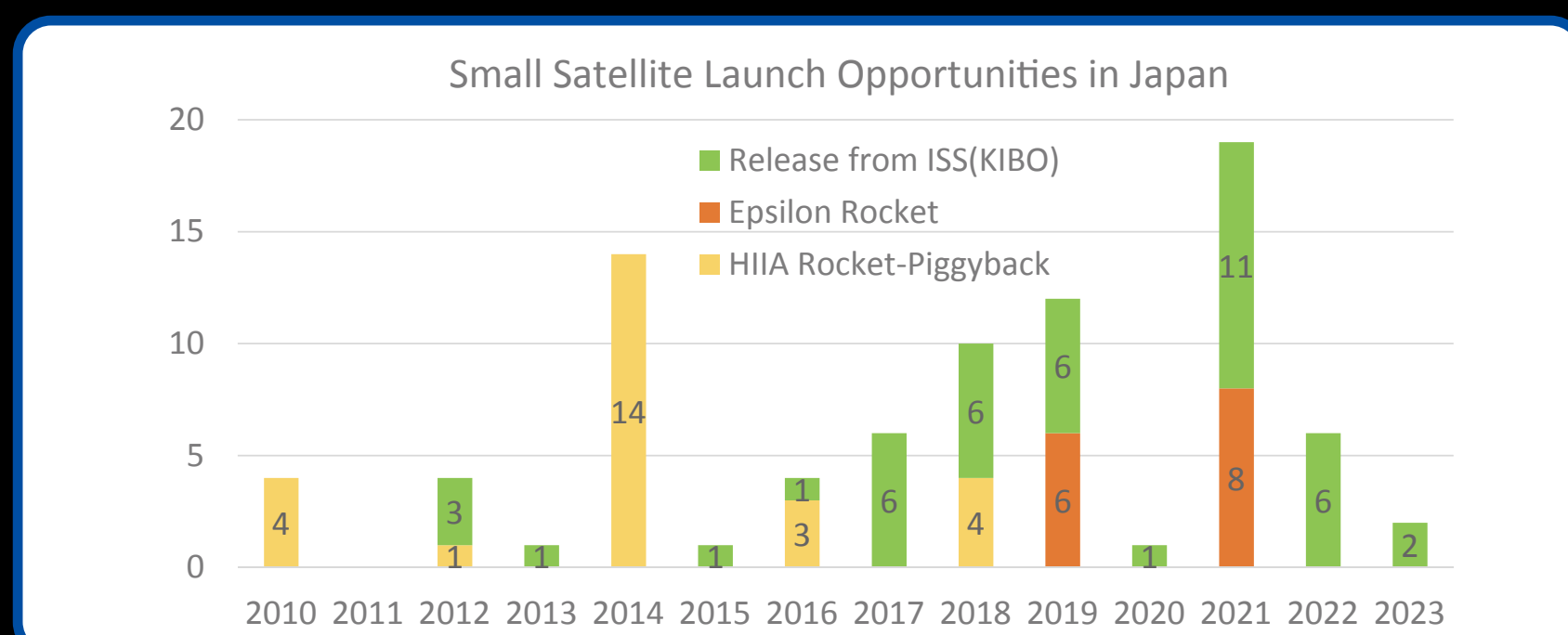




JAXA's New Co-Creation Program for Small Satellite Missions

1. Background

- In recent years, there has been a growing trend in Japan to realize mission ideas using small satellites.
- Also in Japan, rocket development by private companies is progressing, and one of them plans to launch the first unit in 2023.



Epsilon Rocket(26m/95ton)
Solid Fuel Engine

Space One Kairos Rocket(18m/23ton)
Solid Fuel Engine

HIIA Rocket Piggyback H2A(53m/289ton)
Liquid Fuel Engine

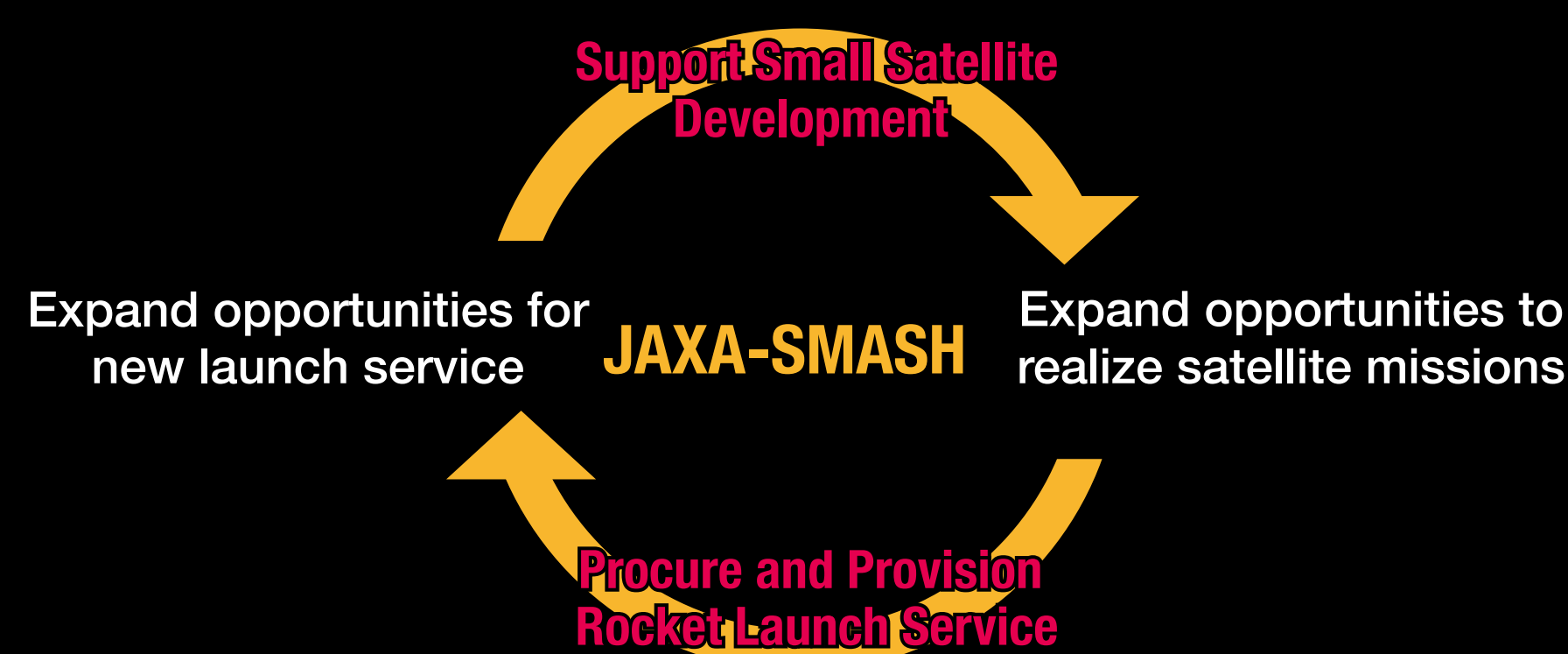
Developed by JAXA

Interstellar Technologies ZERO Rocket(25m/33ton)
Liquid Fuel Engine And more.

Being developing by Startups in Japan

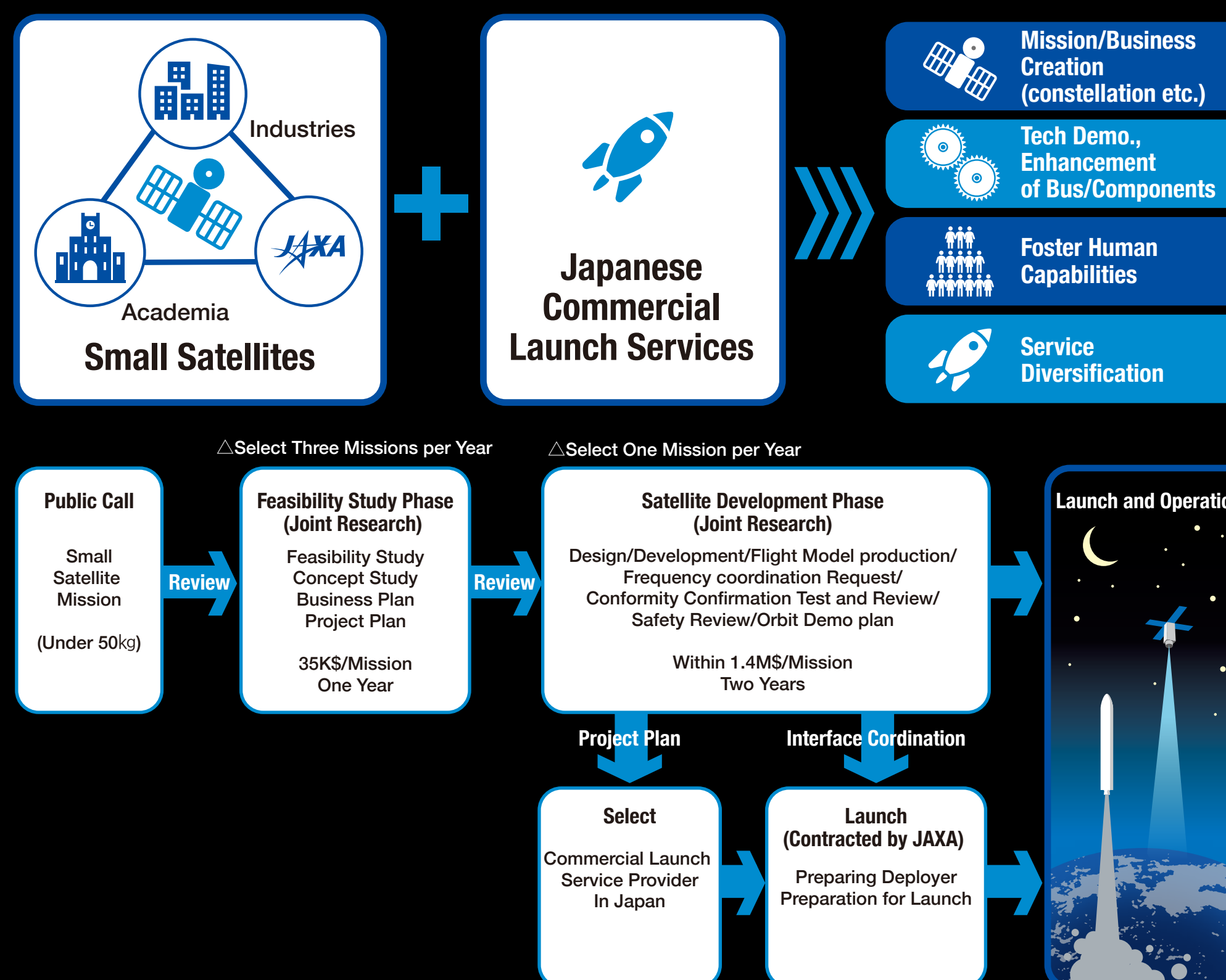
2. Goal

- Expansion of opportunities to realize small satellite missions.
- Expansion of launch opportunities for new private space transportation service providers.



4. Program Overview

- JAXA-SMASH (JAXA-Small Satellite Rush) Program is a research and development program that encourages universities, private companies and JAXA to collaborate to realize small satellite missions utilizing commercial small launch opportunities, and to diversify transportation services in Japan.
- About 3 missions selected by JAXA's small satellite mission public offering can study the feasibility for a year with JAXA. One of the missions selected in the phase transition review can start the satellite development phase.
- This satellite, which was developed in two years, will be launched by a small private Japanese rocket selected by JAXA



5. Activities

- Have communications with Academia and Industries**
SSU* Symposium 2022 : 34 presenters, 410 participants(Include Online)
SSU Symposium 2023 : 34 presenters, 420 participants(Include Online)
SSU* : Small Satellite Utilization



- Support Small Satellite Development**
2022 : 1st Call for Small Satellite Mission Proposal
We started a Satellite development with Kyushu Institute of Technology and started three Feasibility Studies with University of Tokyo and STARS Space Service Co. Ltd and Aoyama Gakuin University.

VERTECS
Visible Extragalactic background RadiaTion Exploration by CubeSat

Kyushu Institute of Technology
Astronomical 6U satellite for observation of visible extragalactic background light to study cosmic star formation history

Press Release

GreFSat
Green Food system support Satellite

The University of Tokyo
Observing plant hyperspectral data from space and extracting the critical indicators for crop yield like canopy nitrogen content.

Altitude Keeping with CNT Tether

STARS Space Service Inc.

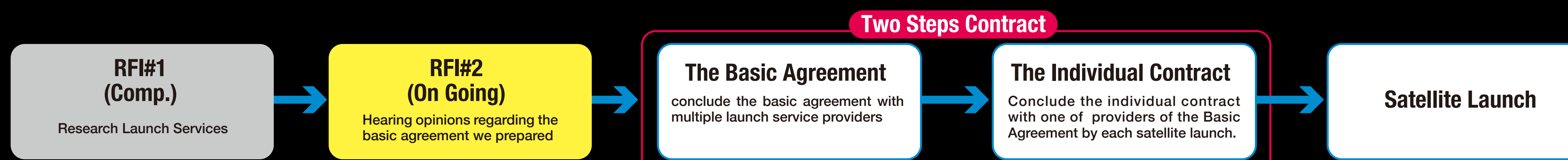
ARICA-2
AGU Remote Innovative Cubesat Alert system -2

Aoyama Gakuin University
Demonstration of the real-time alert system of transient astronomical sources, such as gamma-ray bursts, using commercial satellite network services.

- 2023 : 2nd Call for Small Satellite Mission Proposal
We received Feasibility Study Proposals from Universities and Companies and are judging to select three by September 2023.

Procure and Provision Rocket Launch Service <Two Steps Contract Scheme>

- RFI#1 : Research launch services that can be provided or planed in Japan. (Completed by June 2023)
- RFI#2 : Hearing opinions from launch service providers regarding the basic agreement and the individual contracts we prepared. (Now on going)
- Basic Agreement : Select multiple companies for the basic agreement through public offering and conclude the basic agreement. (End of 2023)
- Individual Contract : Select a launch service provider for each launch from contractors of the basic agreement and conclude the individual contract.



3. Schedule (TBD)

Calendar	FY2022												FY2023												FY2024												FY2025																							
	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar												
Have communications with Academia and Industries	2023/2/21 ▼ 2023 Small Satellite Utilization Symposium ▼																																																											
Support Small Satellite Development (Call for Proposal of Small Satellite Mission)	1st Call for Proposal ▼ 1st selection (Three FS and One Dev. Proposal were selected)												2nd Call for Proposal ▼ 2nd selection(Three Proposals will be selected)												3rd Call for Proposal ▼ Phase Transition Review(Select one mission from three Feasibility Studies)												4th Call for Proposal ▼ Phase Transition Review(Select one mission from three Feasibility Studies)																							
	Feasibility Study(2 University & 1 Company)												Feasibility Study												Satellite Development												Satellite Development																							
	Satellite Development (VERTECS:Kyutech 6U Satellite)																																																											
Procure and Provision Rocket Launch Service													RFI#1 Request for Technical Information												RFI#2 Request for Opinion of Contracts												Call for Proposal of Launch Service												Selection of Multiple Launch Services											
													▼ Select a Launch Services for 1st Launch												▼ Select a Launch Services for 2nd Launch												▼ Select a Launch Services for 3rd Launch																							
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