

Request For Proposal

Launch Service For KARI CubeSats

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Korea Aerospace Research Institute

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1. Introduction

Korea Aerospace Research Institute (hereinafter referred to as 'KARI'), which is funded by government of Republic of Korea (hereinafter referred to as 'Korea') has conducted the CubeSat development contest for domestic university students. KARI has a plan to launch the CubeSats finally selected in this contest using launch service by government fund. This Request For Proposal (hereinafter referred to as 'RFP') document provides information and guide for the Bidders who want to provide launch service for KARI.

2. Statement of Work

The service of Contractor is to launch the following three (3) CubeSats for KARI and Bidders who want to be Contractor should propose launch services for all the three (3) CubeSats.

2.1. CubeSats to be Launched

For scientific purpose and new technology demonstration and verification, the CubeSats listed in the table 1 below will be launched.

Table 1. CubeSats to be launched

No.	Cubesat Name (Developer)	Mass	Size	Orbit	Tentative Launch date
1)	SNUGLITE (Seoul National University)	About 2.1 kg	2U	Near Circular Orbit/ Polar Orbit/ Sun Synchronous orbit/ Altitude: 380~800 km	Q3-Q4 2017
2)	SNUSAT (Seoul National University)	About 3.6kg	3U		
3)	VisionCube (Korea Aerospace University)	About 2.8 kg	2U		

※ Total mass of CubeSats can be changed a little bit.

2.2. Roles of Contractor

- 1) Contractor shall launch the CubeSats (refer to section 2.1) with space launch vehicle. The launch vehicle and the country where the launch will be performed (hereinafter 'launch country') shall be selected for the CubeSats into which any ITAR (International Traffic in Arms Regulations)/EAR (Export Administration Regulation) regulated components can be installed.
- 2) Contractor shall provide KARI with CubeSat deployers (P-POD or ISI-POD) for protecting and separating CubeSats. This includes loan of test deployers to KARI for interface and environment test with CubeSats in Korea.
- 3) Contractor shall perform all necessary administrative work for launch, including Export/Import License and the authorization of Re-Export License from the United States Department of

State based on ITAR/EAR (from Korea to launch country via the country of Contractor), which shall happen in the country of Contractor and the country where the launch shall be performed.

- 4) Contractor shall perform integration and test of CubeSats with deployers in the facility of Contractor.
- 5) Contractor shall perform the transportation of CubeSats and related equipment from the facility of Contractor to the launch site where the launch is performed. This includes works of Export/Import License, the authorization of Re-Export License based on ITAR/EAR, and customs clearance work.
- 6) Contractor shall dispatch personnel to the launch site for the launch and perform work needed for launch including overseeing the integration.
- 7) Contractor shall request and receive timely and properly the information (including the information for Re-Export License based on ITAR/EAR) which KARI should provide to Contractor.

2.3. Roles of KARI

- 1) KARI shall provide the CubeSats to be launched to Contractor.
- 2) KARI shall provide timely and properly the information (including the information for Re-Export License based on ITAR/EAR) which Contractor requests.
- 3) KARI shall provide CubeSats complying with CubeSat standard.
- 4) KARI shall perform interface and environment test of CubeSats with the test deployers which will be loaned by Contractor.
- 5) KARI shall transport CubeSats from Korea to the company of Contractor. This includes works of Export/Import License and customs clearance work.

2.4. Responsibility for exceptions

Contractor shall perform the following items and describe the reasons in detail on Proposal if Contractor can't do.

- 1) In case of launch delay, Contractor shall provide the next launch opportunity without the additional payment.
- 2) In case of launch failure, Contractor shall provide next launch opportunity within two (2) years without additional payment.
- 3) In case that scheduled launch may not be performed by the delay of CubeSat development of Korea, KARI shall notify Contractor this fact of delay minimum three (3) months before the

launch and Contractor shall provide next launch opportunity within one (1) year from the notification without additional payment.

※ In case that launch day is changed, the date of re-launch shall be decided by mutual agreement between KARI and Contractor.

※ If Contractor can meet partially the above items depending on specific conditions, Contractor should describe the conditions and constraints in the corresponding items in the compliance table of Proposal document. For example, time limit for the notification of development delay can be described.

2.5. Payment schedule

Payment will be made in accordance with the table below and it can be adjusted on mutual agreement at Contract.

Table 2. Payment schedule

No.	Milestone	Price	Expected date
1)	Effective Date of Contract (EDC)	25 %	Q3 2016
2)	Launch Window Reservation	25 %	Q3-Q4 2016
4)	CubeSats Delivery to Launch site	40 %	Q1-Q2 2017
5)	After Launch	10 %	Q3-Q4 2017
Total		100 %	

In the case that KARI's budget is insufficient to launch all the CubeSats, Contractor shall launch the reduced number of CubeSats correspond to the given budget. In inevitable circumstance the payment of the Contract can be stopped by KARI's decision.

3. Procedure of Bidding and Contract

Procedure from the issue of RFP to the Contract will be performed as the following sequences.

3.1. Issue of RFP

KARI will inform formally this bidding on external procurement system of KARI and post this RFP on it. The companies which reviewed RFP can ask questions to KARI by e-mail and may inform KARI whether the company will prepare Proposal or not. **Apart from this, draft terms and conditions suggested by KARI will be sent separately by e-mail, so a bidder who wants to participate in the bid shall request the terms and conditions with the submission of letter of intent and the compliance table for the draft Contract shall be included in the Proposal.**

3.2. Bidding

Bidders who want the Contract of this service should make a Proposal document and submit it

to KARI by post (one (1) original and seven (7) copies).

1) Qualification of Bidder

(1) Bidder shall be manufacturer of launch vehicle or provider of launch service who has launch service experience of CubeSats.

(2) Bidder shall launch CubeSats which includes United States components complying United States government's Export License policy.

*. The qualification of Bidders is solely at KARI's discretion, and any Bidders shall not raise any objection regarding KARI's decision thereupon.

2) Bid bond

Bid bond is a critical requirement by Korean government regulation. Bidder shall establish a bid bond for KARI not later than the Bid Closing Date and time and arrive at designated bank in Korea.

(1) The total amount of the bid bond shall be at least five percent (5%) of the total bidding price.

(2) The bond shall remain valid until three (3) months after the Bid Closing Date.

(3) The bid bond shall be in the form of an irrevocable letter of credit established by first class bank and advised to KARI through 'Woori Bank' (Daejeon Branch at 29 Munye-ro, Seo-gu Daejeon, 35241 Korea TEL: +82-42-488-9704, ext. 312).

(4) The bond shall be available by KARI's draft at sight drawn from the bank, accompanied by the letter of KARI stating that Bidder has refused to enter into a Contract with the terms and conditions in the Request for Proposal as amended, if any, that Bidder has hindered the fair bidding by fraud or misrepresentation, or that Bidder has withdrawn its Proposal after the Bid Closing Date.

(5) The bid bond shall contain the substantial part of the terms and conditions of the bond, date of establishment, account, amount, payment terms, and date of expiry, etc.

(6) The bid bond of the Bidders who are not selected as candidates of Contract will be released upon the instructions of KARI without interest promptly after the evaluation of Proposal. The bid bond of the candidates of Contract will be likewise released to the corresponding Bidders when KARI decides not to enter into a Contract with them.

3) Bid Closing Date and Time : Please refer to the Bid Summary.

4) Submission items

(1) Proposal (it should be made based upon the development method in section 4)

(2) Attachment 1. Quote **(It shall be submitted in a separate sealed envelope.)**

- (3) Attachment 2. Certificates for launch service experience of CubeSats (Name of CubeSat, Launch Date, Launch Vehicle, Launch Site, etc.)
- (4) Any other documents Bidder submits can be attached from Attachment 3.
- 5) Submission address
Proposal should be hand-carried or sent to the address of section 5 item 1) by overseas courier.
- 6) Remark
 - (1) KARI does not reimburse to the Bidders the cost (including preparation, submittal and any subsequent clarification or negotiation activities) for the development of Proposal.
 - (2) KARI does not have any duty or responsibility for the Proposal submitted
 - (3) Contents of RFP and Proposal should be maintained confidentially.
 - (4) The Proposal documents presented by Bidders become the property of KARI and are not returned to Bidder.
 - (5) Proposal shall be valid for six (6) months from the Bid Closing Date and, upon KARI's request, shall be extended for another six (6) months.
 - (6) Bidder may withdraw its Proposal at any time before the Bid Closing Date and time in writing.

3.3. Selection of Contractor

- 1) KARI will evaluate on its own authority the Proposals that Bidders submitted until the due date and inform those candidates who may become a Contractor.
- 2) According to the priorities of Contract candidates, KARI of its own authority will select a Contractor by negotiating with the candidate of the highest priority about the price and adjustment for the proposed scope of works.
- 3) Negotiation with the highest priority shall be conducted in KARI in 15 days. If needed, upto another ten (10) days can be extended.
- 4) If the negotiation breaks down with the candidate of the highest priority, KARI will negotiate with the next priority of candidates.
- 5) Major evaluation factors of RFP are the price, Proposal conformance, launch service experience, launch reliability and performance capability. Percentages of evaluation factors are as follows.

6)

Table 3. Evaluation factors

Part	Evaluation factor	Description	Percent.
Technical part	Proposal Conformance	Conformance of Proposal with RFP	70 %
	Launch experience	Launch services experience of CubeSats and general satellites	
	Launch reliability	Launch success rate of launch vehicle and launch site	
	Performance capability	Size and awareness of company	
Price Part	Price of service	Low price of service	30 %
Total			100 %

3.4. Contract

- 1) Expected date for Contract : about 1~2 months after bid closing date
- 2) This RFP and Contract follow the Korean laws and the Korean Commercial Arbitration Board in Seoul of Korea adjusts dispute if it arises.

4. Development of Proposal

- 1) Bidder should develop Proposal only as the format presented at Attachment 1.
- 2) Proposal should use English language and SI units and currency should be expressed in U.S. dollars.
- 3) Bidder shall propose the launch vehicle for CubeSats launch and information related to the launch vehicle, for instance, launch success rate, launch site and so forth.
- 4) As the Attachment 1 of Proposal, Quote should be submitted but the detailed items and their prices should be described in free format of Bidder.
- 5) As the Attachment 2 of Proposal, Certificates for launch service experience of CubeSats (Name of CubeSat, Launch Date, Launch Vehicle, Launch Site, etc.).
- 6) Documents which supplement Proposal can be attached in free format of Bidder from Attachment 3. The examples are as following.
 - (1) Company brochure
 - (2) Experience and carrier in launch service
 - (3) Certificates for government approvals (e.g. export licenses)
 - (4) Information (including launch success rate) of Launch Vehicles and launch date proposed

- (5) Optional services
- (6) Terms and conditions for Contract

5. Pricing Requirements

- 1) Any Price or rate proposed by Bidders shall be firm and fixed, not subject to change for price escalation for the entire period of the Contract.
- 2) Any kinds of taxes and duties arising in connection with Bidder's work under this RFP and under the eventual Contract shall be the Bidder's responsibility, except for the customs duties levied in Korea.
- 3) The price shall be inclusive of any cost or charge incurred due to delivery of any equipment, hardware, software or documentation to KARI or its designated point of delivery.

6. Contact Information

In the contact information table below, the person of item 1) is for administration part and the persons of item 2) and 3) are for technical part.

Table 4. Contact information

No.	Name	Position	E-mail	Telephone	Fax.
1)	Won-Suk LEE	Senior Administrator	wsl@kari.re.kr	+82-42-860-2406	+82-42-860-2666
2)	Han, Sanghyuck	Senior Researcher	shan@kari.re.kr	+82-42-860-3764	+82-42-870-3980
3)	Gong, Hyeon Cheol	Program Manager	hcgong@kari.re.kr	+82-42-860-2497	+82-42-870-3980

Table 4. (continued)

No.	Division	Address
1)	Procurement Team, Management Head Office	Korea Aerospace Research Institute (KARI) 169-84 Gwahak-ro Yuseong-Gu, Daejeon, 34133, South Korea
2)	Future Aerospace Technology Team, Convergence Technology Research Head Office	
3)	Future Aerospace Technology Team, Convergence Technology Research Head	

	Office	
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7. Attachments

- 1) Proposal format
- 2) CubeSat contest information brochure

The end.