

FAQ - Frequently asked questions regarding the announcement of opportunity for a rideshare launch on the *Spectrum* microlauncher

Who can be funded?

This Announcement of Opportunity is open to any European institutional satellite customer of launch services having its seat in either the European Union (EU) or an ESA member state. For the sake of clarity, European institutional satellite refers to satellites operated by or for the benefit of the following entities, irrespective of the launch service procuring entities:

- National governments, agencies and other public entities and undertakings which are part of the administration of ESA member states and/or EU member states,
- Universities and public research centers of EU and ESA member states
- ESA,
- the EU,
- European international organizations, other than ESA, which are composed in terms of number of member states, mainly of ESA member states and/or EU member states.

Furthermore, a potential European institutional customer may provide more than one satellite or may syndicate with other potential institutional customers. In such case, the respective customers shall announce a consortium manager as sole negotiation partner and shall provide all necessary parts to accommodate payloads at their own expenses.

All potential European institutional customers meeting the requirements laid out in this Announcement of Opportunity are invited to submit their application, as per paragraph 6 of the announcement.

What is being funded?

As participation condition of the German micro launcher competition, Isar Aerospace will offer launch opportunities for institutional payloads of up to 150 kg total mass including adapters and/or dispensers on each of their two demonstration flights of the Spectrum launch vehicle. The number of payloads per flight is not pre-defined. The standard launch service - as described in section 2.4 of the announcement - will be free of charge for the selected payloads. Payload adapters respectively dispensers, non-standard services and own costs will have to be borne by the payload owners. A legal relationship with DLR or ESA is not constituted. The concrete rights and obligations are to be negotiated contractually with Isar Aerospace.

When will I receive feedback?

Applicants will receive confirmation of receipt of their application, including the results of a cursory review, within five working days. An acceptance or rejection will be declared by 31.12.2021.

How many applicants are accepted?

A total of up to 150 kg per flight is accepted across all applicants. Example: either a 150 kg satellite of one applicant or a 50 kg satellite of three applicants each can be selected (each including the payload adapter).

What development status must the satellite have achieved by the time of application?

The current development status is not relevant for the application. However, the applicant selection will consider whether the small satellite can be completed at the time of the planned rocket launch in Q3 2022 or 2023.

Can I apply with more than one satellite?

Yes, multiple small satellites per applicant may be proposed.

What do I have to submit for the application?

The following [questionnaire](#) must be completed for the application. If specific questions arise during the selection process, additional documents will be requested.

What happens if I have not completed the satellite by the scheduled rocket launch?

If the corresponding payload is not available in time, Isar Aerospace can request the applicant to provide a mass- and inertia representative dummy payload free of charge.

Is my satellite insured for the rocket launch?

The insurance of the satellite is the responsibility of the respective applicant. In general, there are various insurance companies that offer tailored insurance for commercial satellites before launch, during launch and in orbit.

Is the satellite mission operation financed?

No, only the rocket launch and standard launch services are provided free of charge.

Can I apply as a private company?

No, only applicants from public entities will be considered for selection. However, public institutions may apply in cooperation with private companies, provided that the public institution is the central user of the small satellite. Example: a scientific 3U CubeSat from a university can be used as a technology demonstrator for a propulsion system from a private company.

Are PocketQubes (0.25U CubeSats) approved?

Yes, provided they are transported within an approved CubeSat dispenser. Technical details must be discussed with Isar Aerospace.

Where do I have to have my satellite delivered to for integration into the rocket?

The satellite must be delivered to Isar Aerospace's launch site on Andøya.

What orbit is targeted?

The first flight will launch into a low elliptical orbit (<400km) with an inclination of between 95 and 97 degrees.

Do I have to pay back the cost of the rocket launch?

No.

Which CubeSat dispensers from which companies can be used?

This will be discussed during the negotiations on the launch service contract with Isar Aerospace.

I would like to include a Launch Broker - can this be funded via the Announcement?

No, only the standard launch services according to the announcement of opportunity and the rocket launch are financed. Other services are to be borne by the applicant.

Can multiple orbits be addressed in one rocket launch?

No, the first two demonstration flights of *Spectrum* will target only one orbit.

How do I contact Isar Aerospace?

Isar Aerospace can be contacted via the following email: launch@isaraerospace.com.

Does my small satellite have to be switched off during the rocket launch?

Before launch and during flight, your satellite must be powered down. After integration on the launch vehicle, your satellite is provided an electrical interface and power supply via the Electrical Ground Support Equipment provided for payloads. This will also allow satellite check-outs to be performed after fairing integration and on the launch pad.

Do I have access to my satellite during integration into the rocket?

As a customer of Isar Aerospace, you have access to the launcher adapter for the integration of your satellite and launch preparation. After fairing integration, physical access to the payload is no longer provided for the demonstration flights.

I have ITAR components in my satellite - can it still be launched?

The export and import of your satellite to Norway is not the responsibility of Isar Aerospace. Therefore, the cost and effort of acquiring an ITAR license is the responsibility of the applicant. With an appropriate license the small satellite can be launched.

Can my satellite have a propulsion system or a pressurized fuel tank?

Yes, your satellite can have a propulsion system or pressurized tank when launched on *Spectrum*. However, hydrazine fueling is prohibited for the first few flights.

Who takes care of the registration of the satellite and frequency allocation or other governmental and regulatory requirements?

The applicant or the satellite operator must ensure that the required regulatory and governmental requirements concerning space objects to be launched are met.