# **Satellite Launch Programme**

Call for grant proposals: Frequently Asked Questions



#### Q1. What are the market opportunities?

The global space community forecasts significant growth in the markets for launching small satellites and offering sub-orbital spaceflight. Launching small satellites alone could be worth £25bn globally over the next 20 years. A number of major market international consultancies and surveys (such as EuroConsult and Spaceworks) pointed towards significant expected market growth. We have also commissioned several industrial research studies to examine these growth opportunities and check our expectations.

# **Q2.** Why provide grant funding?

Developing new spaceflight capabilities involves high initial costs. Grant funding might help enterprises to work together to progress the design and development of new infrastructure and technology quickly and effectively, in order to meet our target to begin commercial operations from 2020.

# Q3. Which spaceports are you working with?

We are open to working with any UK sites that have an aspiration to be licensed as a spaceport. Many sites have already discussed their plans with us; we would also encourage new sites to contact us in preparation for applying for a launch license.

#### Q4. Will this define spaceport UK

No. The Government will not w select one location to be a spaceport, and in time we hope that the market for UK launch could support multiple spaceports.

#### Q5. Will this influence who receives a license to launch from the UK?

No. An application for a launch license is entirely separate to this call. Being selected for grant funding or participating in this call will not influence licensing decisions, which will be based on clear and transparent requirements. Our priority for licensing is to make sure that any spaceflight from the UK is safe.

#### **Q6.** What happens if I don't submit a proposal?

This call for proposals is only the first step towards achieving access to space from the UK, and we know that our timelines for first launch may be too soon for some organisations. We hope that achieving this first launch will provide clear confidence in access to space from the UK and encourage others companies to become involved in the UK launch industry.

The UK Government will still work with any spaceport or vehicle operator that doesn't apply for, or receive, grant funding from this call. We will provide ongoing advice, networking and other support opportunities to all organisations who are interested in establishing space launch services in the UK.

# **Q7.** What are the **aims of the Satellite Launch Programme** so I can make sure my proposal is aligned?

The programme's specific aims, as detailed in the Initial Call for Grant Proposals, are to:

- Make the UK the first country in Europe where commercial operators can launch, horizontally or vertically, small satellites into orbit or offer sub-orbital flights for science and tourism; and
- b. Support UK businesses to develop the skills and capabilities to participate in the end to end value chain for these services, from supplying launcher components to payloads and end applications.

# Q8. How do I show that my proposal can meet these aims?

The Initial Call for Grant Proposals provides further details on the Programme, and also includes specific guidelines for preparing an application. This section of the Call for Grant Proposals defines the specific areas we expect proposals to cover and the content you should include.

We are hosting an Industry Event on the 21<sup>st</sup> February at the Royal Aeronautical Society in which the programme aims will be discussed and there will be question and answer opportunities. All potential participants are encouraged to attend. Please contact the UK Space agency to discuss attendance via the following email address:

satellitelaunchprogramme@ukspaceagency.bis.gsi.gov.uk

#### **Q9.** Is this a **UK only** call for proposals?

No, it is open to any companies that are registered or incorporated in a country that is a member of the Missile Technology Control Regime, although we expect proposals to outline how they intend to realise benefits in the UK.

All proposals must be submitted in English, and with any financial data in pounds sterling (£) and all events, meetings etc. throughout the process will take place in the UK or via video-link or telephone conference.

# Q10. How many proposals can I submit?

There is no limit on the number of proposals you may submit.

# Q11. Will you only select one proposal to fund?

We have not set a limit on the number of proposals we may select to fund.

#### **Q12.** I want to submit a **proposal on behalf of** a spaceport / vehicle operator alone. Can I do so?

No. We will only accept proposals provided jointly by at least one party proposing to develop a spaceport and at least one party proposing to operate a satellite launch or sub-orbital spaceflight vehicle from that site.

#### Q13. Is access to my proposal restricted?

Access to your proposal is restricted and the procedure for handling your proposal is included in the Initial Call for Grant Proposals, under our section on confidentiality.

#### Q14. What is the maximum amount I can ask for?

There is no limit on the funding that may be awarded, although as a guide we would require an exceptional case to consider awarding more than £10m to a single bidder.

# Q15. Could you choose not to fund any proposal?

We will consider awarding funding to proposals which make a compelling case that government investment will enable them to deliver the benefits of our Satellite Launch Programme. In the event that we do not consider that any proposal makes a sufficiently compelling case, we reserve the right not to award any funding. However, we may consider providing other non-financial support, including advice and information.

#### Q16. Can you explain more about the selection process?

Proposals must be submitted by 1200 GMT on the 28th April 2017. Proposals submitted after this time will be disqualified. Once received, the proposals will be assessed by a panel who have been convened specifically for this purpose, comprising independent domain experts. Bidders will be invited to present their proposal to the advisory panel. This panel will score proposals against a set methodology that we will publish shortly. The panel will recommend which proposals potentially warrant grant support, for consideration by the government. We shall not be able to release any information on the selection process or outcome until all approval processes are complete. The Initial Call for Grant Proposals provides details on the selection process

#### Q17. Who will be on the assessment panel?

The panel will comprise a selection of independent industry and government professionals selected for their relevant expertise and experience.

# Q18. What criteria will the bids be marked on?

The bids will be marked against the 5 criteria identified in the Initial Call for Grant Proposals:

- a. Technical feasibility of the proposed operations
- b. Commercial sustainability of the proposed operations
- c. Benefit to the UK
- d. Sound management and planning

e. Financial viability of the organisations involved and their commitment to the success of the project

#### Q19. If I need to ask a question, how do I do that?

The UKSA Satellite Launch Programme team can be contacted by email at satellitelaunchprogramme@ukspaceagency.bis.gsi.gov.uk.

We are happy to respond to any clarification questions which participants raise via email to that address, although we shall be publishing a consolidated list of these Q&A to <u>all</u> those participating so that every participant has the benefit of whatever clarifications we make. Therefore please do not raise questions which are commercially sensitive in nature. If you wish to raise a question which you believe should be treated in confidence, you must clearly state this in your request and we shall consider whether the question can be properly regarded as such and answered on a confidential basis.

### Q20. What does the Agency mean by measurable benefits?

A benefit is the effect the project has on its completion. Deliverables on their own, such as facilities and vehicles, deliver no benefits in themselves; the benefits come from the application of those products in the wider environment and the extent to which those contribute to achievement of strategic goals. We anticipate that the outputs of the Satellite Launch Programme will enable benefits through capturing revenues to operators and their wider supply chain through the delivery a flexible and available low cost launch capability or a research and tourism opportunity which is unique in Europe, as well as fostering the growth of new skills and capabilities in the UK's space sector. The successful delivery of the capability should ultimately underpin an increase in the economic performance of the UK through the creation of employment and business opportunities.

In the Initial Call for Business Cases we request that participants describe how their spaceport operations or vehicle manufacturing will utilise the wider expertise available in the UK and benefit the UK economy. In particular, focusing on:

- a. How you intend the development and operation of your vehicle to generate wider employment and business opportunities.
- b. How you intend your spaceport to generate wider employment and business opportunities.
- c. Any UK suppliers that will be involved in any aspect of your activity.
- d. An estimate of the value of the overall UK supply chain that will be generated by your activities with details of your underlying assumptions.
- e. An estimate of the potential number of UK jobs you believe will be created by your activities with details of your underlying assumptions.
- f. An estimate of the spaceport's spillover benefits outside of the direct manufacturing or operational activities involved in any launch with details of your assumptions.
- g. Any service or component that cannot be serviced or produced by a UK company due to current international regulations.

#### Q21. When do you expect to see the benefits delivered?

We anticipate that benefits will accrue over time, initially perhaps associated with the construction of a spaceport and the development of launch technology; later through more steady-state launch operations and growth.

# **Q22.** Will I be able to **meet with the UK Space Agency** Programme Team before submitting my proposal?

As detailed in the Initial Call for Grant Proposals, all those who notify us of their intention to bid will have the opportunity to meet with us. We anticipate that this will be in mid-March 2017. Following your notification of your intent to bid, we shall provide further details in respect of this meeting.

# Q23. I want to talk to the press about our proposal?

Once proposals are submitted we ask that all information on the UK Government's Satellite Launch Programme which you may wish to publish is first discussed and cleared with our communications department.

# Q24. Can you tell me the timelines for selection and notification of successful applicants?

UKSA will aim to notify successful applicants in mid-2017, subject to the successful approval of our business case for investment.

# Q25. What sort of technology are you looking to fund?

We are interested in any proposals that meet the aims of the programme, whether through vertical or horizontal launch models, air-launched vehicles, or an alternative approach. Proposals will be assessed on the feasibility of the technology involved, to ensure that it will support reliable, sustainable and safe commercial operations.

# Q26. Will you need me to match the grant with my own investment?

Your proposal must comply with the regional aid or research, development and innovation provisions in the EU state aid General Block Exemption Regulations (GBER). GBER applies limits on the proportion of costs a grant may cover, depending on the type of activity, the type of organisation and the size of the enterprise. Your proposal must specify the amount and proportion of funding that will be provided from other sources.

# **Q27.** Can you **offer resource** to help me to develop my proposal?

We are not able to offer financial resource to aid the development of proposals. However we are happy to answer questions raised to help you to develop your proposal. We shall be publishing a consolidated list of these Q&A to <u>all</u> those participating so that every participant has the benefit of whatever clarifications we make. Therefore please do not raise questions which are commercially sensitive in nature. If you wish to raise a question which you believe should be treated in confidence, you must clearly state this in your request and we shall consider whether the question can be properly regarded as such and answered on a confidential basis.

#### **Funding Arrangements**

# **Q28.** Are there **restrictions on when** the funding would be made available?

We would expect to provide funding in stages up to the start of commercial operations, as key milestones agreed by us are reached. The first grant funding tranche will be available from the delivery of the first agreed milestone, after the signing of the grant agreement. All grant funding must complete by 31 March 2020. We will not release the full amount in one payment.

# **Q29.** I will need a **sum of money right at the start** of any project to progress the work. Is this ok?

No. In line with government financial policy UKSA cannot and will not pay in advance of need. Invoices can only be paid on proof of work done following a formal milestone review. Our finance department would be happy to provide more clarity on this for those who require it.

#### Q30. How will projects be managed by UKSA?

Although the Satellite Launch Programme is using a grant funding format, projects will be managed the same way as all other UKSA projects: payment of UKSA funds to you will be based around achieving key milestones. You will be expected to attend regular meetings with us to report progress and review the project, and also to keep us updated on the project using an established reporting format. This will be a mandatory process for all grants awarded.

# Q31. If my project fails without showing any benefits do I have to pay the money back?

No, but all proposals will be assessed for viability and likelihood of success before we decide whether to award grant funding.

# **Satellite Launch Programme**

Call for grant proposals: Supplementary questions



# Q32. What activities can this grant funding be used for?

Our call aims to bring together the range of activity needed to enable sub-orbital spaceflight and small satellite launch from the UK. The activities that can be funded include the development of a sub-orbital spaceflight or satellite launch vehicle system, sub-systems or components; and/or spaceport infrastructure; and/or spaceflight or launch operational infrastructure.

Your proposal should identify how the grant funding will be spent in pursuing the goals of sub-orbital spaceflight and/or small satellite launch. All activities supported by grant funding must be discrete and compliant with the relevant state aid exemptions listed in this call. If you are unsure about any conditions on the use of grant funding linked to the state aid exemptions you wish to rely on, you are encouraged to seek independent advice.

Q33. I want to know if my proposal is compliant with state aid legislation. Can you help me?

In line with other UK government and European guidance, the emphasis is on the grant recipient to ensure they are compliant with relevant state aid laws. We cannot provide formal advice relating to whether or not your proposal fits within state aid legislation. If state aid is of particular concern you should seek your own independent legal advice before submitting a proposal.

**Q34.** My organisation is developing a spaceflight vehicle that could be launched from the UK. Can I bid for funding under this call for grant proposals?

This call requests joint proposals, made between both a UK spaceport and a launch vehicle operator. So a spaceflight vehicle operator can bid for grant funding as long as they do so in partnership with a potential UK spaceport location. We cannot accept bids made solely be a vehicle operator.

**Q35.** The formatting and page limits stipulated in the call for grant proposals mean I cannot include all of the information I wish to in my proposal. Will supplementary information, such as Annexes, be considered?

As per paragraph 39 of our call for grant proposals document, only the information contained within the page-limits will be considered by the independent panel when scoring proposals. This is to ensure a common standard of proposals across all bids, and that our independent panel can evaluate all relevant information in a consistent manner. Each bidding team will have the chance to make a short presentation to the evaluation panel to explain their proposal.

Any additional information included will not be used to evaluate any proposal against any criteria.

Q36. Can you tell me more about the presentation to the expert panels?

The expert panel will convene in person on either 15 or 17 May to consider all proposals. They will invite a maximum of three members of each bidding team to provide a short presentation (no more than 30 minutes) on their proposal. At the end of your presentation the panel may ask questions or clarifications

to confirm their understanding. The panel will then finalise their consideration of the proposal, in private, to provide a scoring against each of the published criteria.

**Q37.** If I am invited to present on my proposal to your expert panel, can I only cover the information in my written proposal?

Your presentation is intended to allow you time to explain your written proposal in more detail and for the panel to be sure that they have understood your plans. As such certain information not included in your written proposal may be covered information if this this is directly relevant to questions asked. However it is not anticipated that your proposal will be in any way expanded or materially changed through the presentation.

**Q38.** Will there be any time after we have met the expert panel to answer any outstanding questions or adapt our proposal?

We anticipate that all clarifications and questions will be answered by the bidding teams in person during their presentation. We cannot accept any supplementary or clarifying information after this time.

**Q39.** Can you give guidance on the expertise of the panel? Do I need to explain basic concepts around space launch (for example what is a Sun Synchronous Orbit)?

The panel will be made up of experts drawn from a range of fields and specialisms from government, industry and academia. This will include a number of space sector technical and business experts who will be familiar with terminology and technical aspects related to launch operations, launch infrastructure and spaceflight vehicles.

**Q40.** How will you consider VfM as part of your evaluation process?

The entire scoring system is intended to test the Value for Money (VfM) of any proposal. Value for Money will be considered in detail by the expert panel, and also at an overall level by the UK Government when considering the expert panel's recommendation. In particular the panel will examine aspects of both technical and commercial feasibility, along with the strength of any benefits to the UK, to consider VfM.

More detail on how any proposal will be assessed is given in the detailed scoring criteria hosted on our website at this link: <a href="http://www.gov.uk/government/publications/call-for-proposals-low-cost-access-to-space-from-the-uk">http://www.gov.uk/government/publications/call-for-proposals-low-cost-access-to-space-from-the-uk</a>

**Q41.** Could a company registered outside of the UK receive funding?

A company registered outside of the UK may receive funding. However, proposals must feature a vehicle operator based in nations that are partners in the Missile Technology Control Regime.

**Q42.** Do you need an exceptional case to support an individual case worth £10 million, or the total funding you provide to all proposals?

We have not set a fixed limit on the total number of proposals we may fund, nor the grant amount that we may provide for any individual proposal. An exceptional case would be needed for support to either a single bid, or a combination of proposals, to exceed £10 million.

#### Q43. Is the grant repayable?

Our intention is that funds will be paid to the Grant Recipient in full and not require repayment. However there are exceptional circumstances where we reserve the right to withhold future payment, stop future payment and reclaim part or all of the grant, for example if a condition of grant offer is not met. Section 11 of our draft generic Grant Agreement provides detail on these circumstances.

# Q44. Must the grant be match funded?

The state aid exemptions that you seek to rely on include requirements on the proportion of investment provided from public sources and other sources. We will only consider proposals which are state aid compliant. Therefore, where match funding of a certain level is a condition of the state aid exemption you wish to rely on – this condition must be met.

We cannot provide formal advice relating to whether or not your proposal fits within state aid legislation. If state aid is of particular concern you should seek your own independent legal advice before submitting a proposal. Further detail on state aid regulation and General Block Exemption Regulations (GBER) is available at the following link: <a href="http://www.gov.uk/government/publications/state-aid-general-block-exemption-regulation">http://www.gov.uk/government/publications/state-aid-general-block-exemption-regulation</a>

#### **Q45.** Will you consider paying grants to separate parties or companies as part of one proposal?

In line with standard UKSA grant processes, we prefer to have a single grant paid to a lead organisation who then arranges to allocate funds to other companies in a consortium via payments or subcontracting. However we are open to consider other arrangements or multiple grants if required.

Any grant payment(s) must be state aid compliant, and should therefore take into account the eligible costs that are available under the relevant General Block Exemption Regulations (GBER). If grant funding is requested under separate exemptions then the GBER provisions on cumulation (and relevant notification threshold/s) should be considered.

#### **Q46.** Must the bidding party be the recipient of grant funding?

Our preference is to have a single grant paid to a single organisation that is clearly leading the proposal, and can then allocate funds to other companies in a consortium via payments or subcontracting. However we are open to consider other arrangements if required.

All parties that will receive funding must be clearly identified in your proposal and milestone payment plan. All organisations that you propose to receive grant funding must, as part of the covering letter outlined in paragraph 40 of our call for proposals, provide both a committing offer to carry out the activity in question and an acceptance in principle with the terms of our draft grant agreement.

In the event of a successful bid, we anticipate working closely with all grant recipients when agreeing the final and formal grant agreement.

# Q47. If the UK Space Agency provides a grant award, how will the payment milestones be set?

Your proposal should include a clear, achievable milestones plan with the tangible deliverables and outputs clearly defined and the cost against each milestone. The milestone plan will then be agreed when with the UK Space Agency and the grant recipient upon signing the final grant agreement.

Payments will be realised upon evidenced, successful delivery of each of the milestones. Payment cannot be provided in advance of need.

**Q48.** What format will the grant agreement take for any funded proposals, and can I adapt this to suit my proposal?

We have provided a copy of our generic grant agreement to all potential bidders that have notified us of their intention to bid. This is the base document that will be adapted for any successful bidders to receive their grant. Whilst we will not accept material changes, any small variations submitted will be considered. The UK Space Agency and its commercial partner, UK SBS, will discuss this grant agreement with any bidders that enter successful proposals.

**Q49.** Can I request a grant where payment is dependent on external activity or authorisations being completed successfully first?

Yes, a conditional grant is acceptable as long as a firm commitment is made to launch from the UK and a clear, achievable plan is in place to enable this launch. We would expect to see this reflected in the proposed milestone payment plan in your proposal, alongside mitigation or contingency plan to order to provide confidence that milestones will be completed and the project will be successfully delivered. Any milestone that releases UK Space Agency grant funding must occur after the external activity is completed.

**Q50.** Could I ask for grant funding to cover costs for patenting my space launch concept?

The GBER provisions concerning Regional Aid or Research, Development and Innovation contain detail on which costs (such as patent applications) are eligible for our grant funding. We cannot provide formal advice relating to whether or not your proposal fits within state aid legislation, but encourage you to consider state aid carefully and, if required, seek independent legal advice.

**Q51.** Will additional funding be made available to grant recipients later in the project if they discover they need more money?

The grant agreement will specify the total grant award to be paid, the terms and conditions around that the grant offered, and the payment milestones to be delivered. We do not anticipate increasing any grant awards during the project.

**Q52.** When will you provide more information on your regulatory requirements?

The draft Spaceflight Bill was published on 21<sup>st</sup> February. The Department for Transport, Civil Aviation Authority and UK Space Agency are engaging with industry to inform the development of the detailed regulatory framework. This will also be informed by the funding proposals we receive.

**Q53.** What is your view on one party being involved in multiple bids?

There is no limit on the number of proposals a party may be involved in. Proposals involving multiple parties (for example one spaceport working with multiple operators) may be entered as separate, independent partnership proposals; or as a single consortium proposal.

If you are involved in more than one proposal, it would assist our consideration if you identify any funding requirement that is duplicated in other proposals.

**Q54.** I am considering using components sourced from other nations as part of my proposed launch vehicle. Is this something I need to consider in my proposal?

Yes, there are frequently export controls related to space transport or launch vehicles that you will need to consider, such as the US International Traffic of Arms Regulations (ITAR). You should also consider whether your proposal meets the UK's obligations as a partner in the Missile Technology Control Regime (MTCR). As per paragraph 47 of our call for grant proposals document, we ask that you specify any components or systems that require non-UK governmental approvals or support to be transported to, built in or used in the UK.

Q55. I want to apply for funding but am planning to launch after 2020. Am I eligible to apply?

Yes, we will consider any proposal that launches from the UK from 2020 or later. However any proposal for launching later than 2020 may score less well in this respect against our evaluation criteria. We ask all applicants to consider the detailed scoring criteria hosted on our website at this link: <a href="https://www.gov.uk/government/publications/call-for-proposals-low-cost-access-to-space-from-the-uk">https://www.gov.uk/government/publications/call-for-proposals-low-cost-access-to-space-from-the-uk</a>

**Q56.** My proposal will only offer parabolic flights. Is this in scope for grant funding?

We will only consider those proposals that seek to launch small satellites or sub-orbital vehicles from the UK. As parabolic flying can be achieved at normal flight altitudes, and are not sub-orbital, we therefore would not consider a proposal that only offers parabolic flights.

**Q57.** I want to launch from a location that is not yet part of a spaceport. Am I able to apply for your grant funding?

We will examine each proposal to assess whether they pass the mandatory criteria, namely that any proposal be provided jointly by at least one party proposing to develop a spaceport and at least one party proposing to operate a satellite launch or sub-orbital spaceflight vehicle from that site. Any proposal must feature both of these parties. The definition of what geographical area is part of the spaceport site is up to the party that is proposing to develop or operate the spaceport. The site does not need to be owned by the spaceport operator right now, but they should be in a position to provide a firm commitment to operate from that site from 2020.

Aside from the mandatory criteria, our expert panel will consider any dependencies or risks to delivery that are part of your proposal when scoring each proposal. The scoring criteria hosted on our website provides more detail on this. It is possible that issues around site ownership or permission to operate from that site could result in a reduced score.

**Q58.** I represent a spaceport, and am working with multiple vehicle operators. Do I have to submit separate proposals with each operator?

No, you can choose to submit a single proposal that includes the plans of multiple operators if you wish. In this case each of the operators would be working together, along with you, to provide a joint business plan. This plan should include all of the funding each party is requesting from the UK Space Agency. We will consider this as a single request for the total amount.

Alternatively you can choose to submit separate proposals for each operator. Each proposal will be considered on their individual merits. If you submit more than one proposal, it would aid our

consideration if you clearly marked any elements of your funding request that are duplicated in your other proposals.

**Q59.** I represent a spaceport, and think we can achieve better VfM by having multiple operators using our facilities. However I am likely to enter separate proposals for each operator. Will this affect my proposal?

Each proposal will be scored on its own merits and in isolation. It is likely that if a bid is reliant on other proposals to make it <u>commercially sustainable</u>, this could result in a reduced score. Instead you may want to provide evidence of how you intend to generate further commercial returns from your spaceport facilities – for example by attracting other operators to use it. This approach will come with a level of risk that will be assessed by our expert panel.

**Q60.** Please can you confirm the size of the paper to be used in any submissions, and that margins apply to all content?

We ask that all proposals are submitted on A4 size paper. The minimum margin requirement of 1.5cm applies throughout. Therefore we ask that no content (e.g. narrative, diagram, schedules, pictures or data tables) is within 1.5cm from the edge of any page.

**Q61.** Is a smaller font size available acceptable in graphics (e.g., schedules, tabular data in tables, and diagram callouts) acceptable in order to maximize readability?

The font size limit of Arial size 12 is intended to apply to all substantive text and narrative. We are happy to accept Arial size 10 in supplementary diagrams or pictures if required. However we ask text or numbers in schedules and data tables are included with Arial size 12 font to maximize readability.