

Satellite Launch Programme

Initial Call for grant proposals



HM Government is committed to enabling access to space from the UK. We are inviting applications for public grant funding from enterprises capable of starting sustainable small-satellite launch or sub-orbital spaceflight operations from a UK spaceport from 2020.

This note outlines how the UK Government intends to support industry to provide access to space, the advantages of establishing these services in the UK, and our offer of potential grant funding.

Strategic Context

1. The Government's ambition is to grow the UK's share of the global market from 6.5% to 10% by 2030. To achieve this ambition, industry will need to quickly seize the most significant growth opportunities in current and emerging markets.
2. The market for small satellites in particular is expected to grow rapidly in the coming decade. New constellations of hundreds of small satellites are due to be launched to provide enhanced imaging and telecommunications. Companies are innovating to create the vehicles necessary to place satellites in key orbits and provide reliable, low cost launch services. Entrepreneurs are also fostering a new global market around sub-orbital spaceflight that not only offers a unique environment for scientific research, but could also create new opportunities for tourism or high-speed travel.
3. Our National Space Policy of 2015 has also set a clear aspiration to enable access to space from the UK: *"Access to safe and cost-effective launchers is clearly fundamental to any country's long-term capacity to participate in space-based activities. Government will enable access to new space markets where they offer significant advantages to UK space businesses"*.

The Satellite Launch Programme

4. The UK Space Agency has established the Satellite Launch Programme to support UK industry in seizing these opportunities. Our vision is to establish thriving markets for both small satellite launch and sub-orbital spaceflights, with commercial operations starting from at least one UK spaceport in 2020. Our specific aims are to:

- a. 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.
5. The UK Government is taking decisive action to help UK businesses enter these growing markets. Our approach is split into three strands:
 - a. **Establishing a supportive licensing regime.** We intend to introduce legislation that will define the UK's regulation of spaceflight, and balance industrial innovation with the need for safety in space operations. We are learning from and working with international partners as we develop our approach to ensure it is supportive and proportional.
 - b. **Obtaining international approvals.** A UK spaceport may attract interest from around the world. We will use our diplomatic and international relationships to facilitate and support engagements with other nations.
 - c. **Stimulating supply and demand.** We will provide advice and support, including through financial incentives, to grow sustainable supply and demand for small satellite launch and sub-orbital spaceflights from the UK.
6. We anticipate that these services will generate a range of benefits for the UK and for participating businesses. Offering a launch capability designed around the needs of small satellite companies should help them to launch more cheaply and flexibly, and meet the anticipated high global demand, including to service new satellite constellations. It could also contribute to the UK's national defence capabilities.
7. Additionally, offering sub-orbital spaceflights should both support researchers across a range of disciplines to access a unique environment for scientific experiments, and tap into the growing demand for an unparalleled passenger experience.

Why do this in the UK?

8. We encourage businesses from around the world to consider collaborating with UK enterprises to offer these services from a UK spaceport.

9. The UK is a well-known business hub. Our tax and regulatory regimes make it one of the easiest places to do business in the world. Space companies also benefit from the UK Government's clear commitment to our space sector, which has annual revenues of £13.7 billion and employs 38,500 people.
10. The UK already boasts world-leading satellite manufacturing and satellite data application sectors. British manufacturing is helping to meet the rising global demand for small satellites, including for imaging and communications constellations. The UK's recently published green paper, Building our Industrial Strategy, identified satellites and space technology as key growth areas. Organisations like the Satellite Applications Catapult and Innovate UK are also investing in new payload technology and data applications.
11. A launch capability would bridge the gap in our small satellite value chain. Our island geography and northerly latitude make the UK especially well placed to reach the polar and sun-synchronous orbits that are expected to be in demand. The UK also benefits from a strong manufacturing and engineering heritage, and British businesses are well placed to contribute along the supply chain for launcher technology.
12. For those interested in offering sub-orbital services, the UK leads the world in science and research, with amongst the highest spend on research in the world. It is also already one of the most popular locations for tourists, and London is home to more high net worth individuals than any other city.

Invitation to submit grant proposals

13. As part of our commitment to supporting access to space from the UK, we will offer advice and support to enterprises proposing to establish and operate from a UK spaceport from 2020. Aiming to launch from the UK from 2020 is necessary to capture the growth potential offered by these emerging markets. 2020 is a challenging aim, and in addition to our core role in establishing the regulatory framework, further government support may be required to enable industry to achieve this goal.
14. We are therefore considering providing one-off grant funding in order to support the first missions from the UK. This is intended to be used in connection with the development or operation of a spaceport and/or of a satellite launch or sub-orbital spaceflight vehicle or system. If awarded, our funding must be used to complete discrete activity that will enable spaceflight from the UK such as work to plan, design and build spaceport infrastructure; adapt launch vehicle technology for use; or attract customer payloads.

15. We have not set a limit on the total grant we may provide, although as a guide an exceptional case would be needed for investment over £10 million. We have also not capped the number of proposals that we may choose to support, nor the number of proposals that an applicant may choose to take part in. However we encourage those interested to consider carefully the global demand and competition for their services, and how their offering meets commercial expectations on cost, flexibility and reliability.
16. **To be considered for a grant, we are inviting proposals that provide an outline business plan on launching small satellites or providing sub-orbital spaceflight from a UK spaceport from 2020.** We recognise that this work depends on collaboration across the supply chain; we will therefore only consider 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. Both spaceports and vehicle operators must provide a firm commitment to operate from the UK from 2020. We will consider proposals that rely on either a horizontal take-off (including air-launch) or vertical launch model.
17. The Government has published guidance on the General Block Exemption Regulation (GBER) which covers a range of pre-approved types of state aid that do not require individual approval from the European Commission, or prior notification to the European Commission, in advance of being granted. We will only consider requests for funding which comply with the regional aid exemption (Section 1) or aid for research, development and innovation exemption (Section 4) provided for in GBER. Further guidance is enclosed in Annex B, whilst a full guide is available at the following website:
- <https://www.gov.uk/government/publications/state-aid-general-block-exemption-regulation>
18. Enterprises that do not submit proposals for grant funding, or are not selected to be funded, may still be supported non-financially by the UK Space Agency. This may include sharing information, helping to set up links with new customers and facilitating international engagement. We also intend to provide further support later in 2017 to stimulate development of payloads or the UK supply chain.

Selection of proposals

19. After the deadline for final submissions, valid applications will be sent for assessment. Only applications that meet the following mandatory eligibility criteria and scope of the call will be sent for assessment:

- a. Alignment with the aims of the Satellite Launch Programme;
- b. Alignment with page counts and information requested in Annex A;
- c. Alignment with State Aid regulations as detailed in Annex B;
- d. Jointly proposed by at least one potential spaceport and at least one satellite launch or sub-orbital spaceflight vehicle operator;
- e. Proposals must feature a clearly defined plan for use of the requested grant, including a milestone payment structure;
- f. Proposals must feature a vehicle operator based in nations that are partners in the Missile Technology Control Regime (MTCR).

20. The UK Space Agency reserves the right to declare applications as out of scope.

21. Applications that meet the mandatory criteria above will be assessed by an independent advisory panel. This panel will consist of independent UK Space Agency approved reviewers drawn from academia, industry or government. This panel will assess the proposals according to a set scoring system on a set number of criteria. Bidding teams will be invited to present their proposal to the advisory panel, on a date to be set when the UK Space Agency is aware of how many bids are to be evaluated. Following these presentations the assessors may modify their scoring, taking into account both the written and verbal information.

22. Bids will be assessed against a range of criteria, with criteria weighted to reflect their relative importance to the final score. A copy of the scoring system and weighting is available alongside this document at <http://www.gov.uk/government/publications/call-for-proposals-low-cost-access-to-space-from-the-uk>. The criteria to be assessed will include:

- a. Technical feasibility of proposed operations;
- b. Commercial sustainability of 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.

23. Assessors will provide written feedback for each scored question in the application. All applications are assessed on individual merit. The UK Government will make the final decision regarding funding, using the panel’s recommendations and wider relevant legal, policy and financial considerations.
24. To aid our consideration, Annex A provides guidance for a proposal and sets out the minimum information that all submissions must include.

Schedule

25. Figure 1 shows the full timetable for this call for grant funding. This call will open on 09 February 2017, and **will close on 28 April at 12 noon (GMT)**. Bidders will be notified separately of the results of their bid in mid-2017, and where possible feedback will be provided on proposals.
26. Any enterprises that may wish to participate in this call are invited to attend the UK Space Agency LaunchUK event on 21 February in central London. Attendance at this event will provide an opportunity to network with potential stakeholders, and will be useful for UK Space Agency staff to understand the range and number of potential proposals. However attendance will not confer any advantage on any potential bidder, and all materials will be made publically available. Please email satellitelaunchprogramme@ukspaceagency.bis.gsi.gov.uk to discuss attending this event.

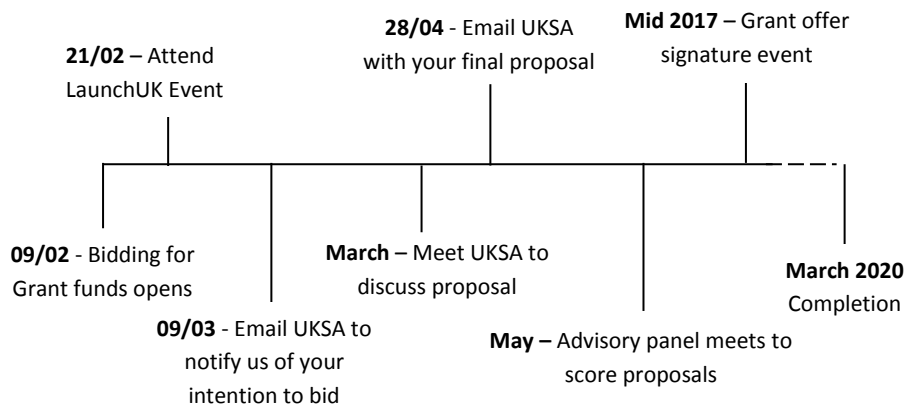


Figure 1: Timeline for grant applications and selection

27. Applicants are requested to notify the UK Space Agency of their intention to bid, by sending an email detailing the parties involved in the bid to satellitelaunchprogramme@ukspaceagency.bis.gsi.gov.uk. This notification must be received by 12 noon (GMT) on Thursday 09 March 2017 and will be held in confidence. The purpose of this is to enable the UK Space Agency to firmly gauge the expected

number of responses and potential workload of proposal reviewers. Similarly to the final proposal, any notice of intention to bid must be made jointly by the party that would establish the spaceport and the party that would operate the satellite launch or sub-orbital spaceflight vehicle from that site.

28. Each enterprise that notifies the UK Space Agency of their intention to bid will be invited to attend a UK Space Agency-led meeting in mid-March to ensure their proposals are well matched to the requirement. For transparency we will provide all parties that intend to bid with copies of all relevant questions and answers, with any commercially sensitive information removed, as they are posed by potential bidders. All questions received will be answered as soon as possible but all questions must be submitted by noon on 15 April as any received after this date will not be considered
29. The final proposal must be submitted electronically to the satellitelaunchprogramme@ukspaceagency.bis.gsi.gov.uk email address by no later than 12 noon (GMT) on 28 April 2017. Any proposals received after this date will be ineligible. Please note that no extensions to this final deadline will be permitted, in order to meet the ambitious timelines required to achieve launch from the UK from 2020.
30. Once all proposals are submitted, and in line with the selection process detailed below, an independent advisory panel will consider all bids that pass the mandatory criteria. At this stage bidders will be invited to present their proposals to the panel, at a date to be agreed depending on the number of bids.
31. The panel's advice will prompt a series of internal government processes that must be completed to award any grant. The panel may pose questions on proposals to the originators, which will be passed to the lead point of contact nominated by each enterprise. We will endeavour to contact all bidders with results in mid-2017, and will invite any successful bidders to a grant-offer signing event.
32. Grant funding 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. Grant funding will be provided as milestone payments when discrete activities, listed in any proposals, are completed to the satisfaction of the UK Space Agency. No payments will be paid in advance of activities being completed. Draft copies of the Grant Agreements for funding will be made available to each enterprise that notifies us of their intention to bid.
33. Grants will only be awarded to proposals which are judged to be of sufficient quality. The UK Space Agency reserves the right to re-issue this call in a revised form if all the allocated funds are not utilised.

Confidentiality and commitment

34. The procedure for handling and assessing the bids and notifications will be as follows:

- a. Notifications of intention to bid will be submitted to the UK Space Agency Satellite Launch Programme Director. They will hold all notifications in confidence within the Agency and will not share the information elsewhere;
- b. Final proposals will also be submitted to the UK Space Agency Satellite Launch Programme Director. They will hold all notifications in confidence within the Agency and will retain these as confidential information;
- c. When the bid period closes, electronic copies of the bid documents will be distributed to the appointed independent assessment panel members - UK Space Agency confidentiality rules will apply;
- d. For those bids not recommended by the panel for funding, all associated documentation will be destroyed. They will not be visible to any others and names of any unsuccessful bidders will not be published;
- e. All bids recommended by the panel for funding will be visible to the UK Space Agency Satellite Launch Programme staff, one of whom will be appointed by the Agency to act as the interface with the project manager;
- f. All documentation relating to bids selected for funding will remain confidential within the UK government.

35. Information submitted as part of a proposal, or subsequent commercially sensitive information submitted as part of a contract, will not be disclosed by us save for in so far as we consider necessary, in our absolute discretion, to comply with our legal obligations under the Freedom of Information Act 2000, Environmental Information Regulations 2004 or any other legal act, requirement or obligation. Where permitted by law we will attempt to notify you in advance and take your view as to the appropriate scope of any such disclosure.

36. The UK Space Agency will monitor any funded projects through regular project reports and updates, with payment milestones accompanied by a series of formal reviews. A cross-government Programme Board of senior officials will provide governance, supported by dedicated UK Space Agency staff. The UK Space Agency preference is that all reporting be completed without disclosure of any confidential information. Any requests for the exchange of information to be covered by a Non-Disclosure Agreement will be considered by the UK Space Agency.

37. For the avoidance of doubt, the issue of this Initial Call for Grant Proposals is not a commitment by the UK Space Agency to take forward or support any proposal as a result

of the proposal exercise or at a later date. Any expenditure, work or effort undertaken prior to an offer of support and acceptance thereof is a matter solely for the commercial judgement of your company, and the Government will not be held liable for any costs incurred by participants in connection with the proposal process.

38. The issuing agency reserves the right in its absolute discretion to:

- a. waive or change the requirements of this Initial Call for Grant Proposals from time to time through a formal amendment, initiated by the Agency.
- b. seek clarification in respect of a participants proposal;
- c. disqualify any participant that does not submit a compliant proposal in accordance with the instructions in this Initial Call for Grant Proposals
- d. disqualify any Bidder that is guilty of serious misrepresentation in relation to its proposal or the proposal process;
- e. withdraw this Initial Call for Grant Proposals at any time, or to re-invite proposals on the same or any alternative basis;
- f. choose not to support any proposal as a result of this proposal process.

Guidelines for preparing an application

39. Applications should take the form of a proposal in single-spaced typescript (minimum font size 12 point Arial, minimum 1.5 cm margins all round, including diagrams and tables). Table 1 gives a summary of the sections required in any proposal alongside a maximum number of pages for each section. Information provided over the number of pages specified below will not be considered by the advisory panel when proposals are scored, but may still be read by the UK Space Agency team for context.

Section	Description	Max pages
Cover letter	See below	2
Project Summary	A summary of the project suitable for public release.	1
Company and organisation	Detail of parties involved in your proposal.	2
Commercial case	A description of how your proposal is commercially and economically viable.	4
Technical proposal	An outline of the spaceport and vehicle you are proposing to use, alongside the timelines involved in establishing your services.	10
UK benefits	A description of the economic benefit to the UK and the details of the prospective UK supply chain.	3
Financial and management information	Detail on your projected cost information and management processes.	4
State Aid	A detailed description of how your proposal meets the GBER criteria outlined in Annex B.	1

Table 1: Sections required in each proposal for grant funding

Covering Letter

40. To ensure ease and speed of placing the contract if successful, any proposal must include a covering letter containing:

- a. The identities of the spaceport and vehicle operator parties involved in the bid;

- b. A clear indication of the activity that will be funded by our grant;
- c. A committing offer to carry out the activity in question made to the UK Space Agency, who will contractually administer the grants;
- d. A clear indication of the State Aid exemption category you consider applies i.e. the specific Regional aid and/or Research, Development & Innovation aid category within the GBER that you believe will give your project cover;
- e. A statement of acceptance in principle of the terms of the UK Space Agency Grant Agreement. A copy of this Grant Agreement will be made available by the UK Space Agency when bidders notify us of their intention to bid;
- f. A nominated single point of contact for the bidding enterprise.

Project summary

41. Please provide a one page summary of your proposal that can be used in publications, for example on the UK Space Agency website or in a press release if the project is funded. A textual summary alongside a picture or diagram is suitable.

Company and Organisation

42. Please list the parties participating in this proposal. These must include 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.
43. Please list the ownership of all companies involved in this proposal. If applicable please also list the ownership of any parent companies. Please clearly indicate if there is any state ownership of any companies or parent companies involved in this proposal.
44. In addition, please specify the parties' expertise and experience. You should support this with evidence of a track record of successfully delivering relevant activity. You may also optionally provide signed letters of support from third parties that are not directly participating in this proposal, if you believe these may aid our consideration.

Commercial case

45. Please describe the reason for investing in commercial satellite launch or sub-orbital flight. In particular please specify:
- a. The potential demand for your services you anticipate, looking as far forward as 2030 with details of your underlying assumptions and evidence;

- b. An estimate of all anticipated vehicle development, infrastructure, range and operational costs associated with your proposal (with details of your underlying assumptions);
- c. An estimate of the annual revenues that will be earned by the spaceport and launch vehicle's operations with details of your underlying assumptions.
- d. The type and quantity of customers you intend to attract, or have attracted already;
- e. Your reasons for seeking to establish these services in the UK, with details of what makes this a commercially viable proposition;
- f. A simple estimate of the return on investment over time in terms of revenues to the operator and spaceport, unadjusted for inflation and undiscounted, and excluding any wider economic benefits.

Technical Proposal

46. Please describe the **spaceport** facilities you intend to develop. In particular, please specify:

- a. The location you have identified and its current use or ownership.
- b. The services that you intend to provide from this location, including whether it will offer vertical launch, horizontal space take-off or both services, and whether it will be open to more than one vehicle operator.
- c. The infrastructure that you intend to build and the planning and other local approvals required.
- d. The number of launches or sub-orbital spaceflights that you intend to take place from your spaceport each year, taking into account weather, customer demand, market competitiveness and other considerations.
- e. How your spaceport design has regard to customers' operating and commercial requirements.
- f. How your spaceport design will ensure the safety of employees, spaceflight participants and third parties.
- g. Which organisations you will intend to provide your range or tracking activities.
- h. How your spaceport design has regard to the importance of environmental protection, including the impact on both wildlife and human populations.
- i. How you intend to engage with the local community on your spaceport plans.

47. Please describe the **satellite launch or sub-orbital vehicle** you intend to launch or fly from this spaceport. In particular, please specify:

- a. The vehicle's design and functionality, including its maximum payload capabilities and type of propellant.
- b. The vehicle's current operating status, and when you expect it to be used in commercial operations if it is not currently.

- c. Any components or systems that require non-UK governmental approvals or support to be transported to, built in or used in the UK.
- d. How your vehicle design has regard to customers' operating and commercial requirements.
- e. How your vehicle design will ensure the safety of employees, spaceflight participants and third parties.
- f. How your vehicle design has regard to the importance of environmental protection.

48. Please outline the **timeline to establish your spaceport and operate your vehicle's first satellite launch or sub-orbital spaceflight**. Please provide key milestones, including where relevant:

- a. Securing funding.
- b. Application for and receipt of required approvals, including planning and regulatory.
- c. Start and completion of spaceport infrastructure design, testing and construction.
- d. Start and completion of vehicle design, testing and construction.
- e. First small satellite launch or sub-orbital spaceflight.

UK benefits

49. Please describe how your spaceport operations or vehicle manufacturing will utilise the wider expertise available in the UK and benefit the UK economy. In particular, please specify:

- 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.

- h. Any wider, non-economic benefits you predict being created by your proposal such as national security.

Financial and management information

50. Please provide detail on the structure and timings of the grant you are requesting from the UK Space Agency, and if there are other parties investing in your proposal. In particular, please specify:

- a. How much money you are seeking from the UK Space Agency to support this work and what you would use this for.
- b. A table of proposed payment milestones for any UK Space Agency funding, with activity description, payment plan, duration, deliverables and dates.
- c. If this amount is less than the total cost, the amount (in GBP and VAT inclusive) and proportion of:
 - i. Private funding;
 - ii. Other UK or local government funding;
 - iii. Other non-UK governmental funding;
 - iv. Any other funding being contributed.
- d. A clear statement of the GBER State Aid Category, any Private Venture (PV) investment offered, and its relationship to the State Aid limits under GBER.

51. Please describe the programme management, governance and oversight arrangements you will use to assure your time, cost and quality specifications.

52. Please describe any key risks, constraints or uncertainties that you anticipate, alongside any processes or measures in place to manage (or mitigate) these risks. These risks could include those that are:

- a. Programmatic.
- b. Technical.
- c. Safety.

State Aid

53. Please describe how, in your view, your proposal complies with either of the following State Aid GBER – (1) regional aid or (2) research, development and innovation. You may rely on more than one available exemption provided each element can demonstrably stand alone should other element not occur. Full detail on these two schemes is available in Annex B.

State Aid guidance and intervention levels

Bidders must ensure their proposal is compliant with the relevant State Aid legislation. The current call requests proposals that comply with the following State Aid General Block Exemption Regulations (GBER) – **Regional Aid** (Section 1) or **Research, Development and Innovation** (Section 4). Each of these GBER categories contains specific provisions for the level of grant funding available for specific activities. Proposals that do not comply with the chosen GBER criteria, or cannot demonstrate how they comply, will not attract grant funding due to the additional time required to notify the European Commission.

The GBER regulations allow differing intervention rates (i.e. maximum % grant offered) depending on the type of activity, the type of organisation, and the size of the enterprise. The EC definition of the various enterprise types is shown below (image taken from http://ec.europa.eu/enterprise/policies/sme/files/sme_definition/sme_user_guide_en.pdf):

Enterprise category	Headcount: Annual Work Unit (AWU)	Annual turnover	or	Annual balance sheet total
Medium-sized	< 250	≤ €50 million (in 1996 € 40 million)	or	≤ €43 million (in 1996 € 27 million)
Small	< 50	≤ €10 million (in 1996 € 7 million)	or	≤ €10 million (in 1996 € 5 million)
Micro	< 10	≤ €2 million (previously not defined)	or	≤ €2 million (previously not defined)

Anything above the limits for a medium sized company is designated as a large company.

Regional Aid

Regional aid is to promote the development of the less-favoured regions mainly by supporting initial investment, or in exceptional cases, by providing operating aid. There are two categories of eligible regions:

- Article 107(3)(a) regions: These are regions, designated in a regional aid map, where the standard of living is abnormally low or where there is serious underemployment

(NUTS II regions with a GDP / cap lower than 75% of the EU average). In the UK this is Cornwall, West Wales and the Valleys.

- Article 107(3)(c) areas: These are regions, designated in a regional aid map, defined on the basis of national indicators proposed by the Member States. The assisted area map can be found here: www.ukassistedareamap.com.

The following principles must be met for any grant request under the regional aid exemption:

- The aid amount must be lower than €7.5million in a 10% 107(3)(c) area, €11.25m in a 15% 107(3)(c) area or €18.75m in a 107(3)(a) area.
- The undertaking receiving the aid must not have closed down the same or similar activity in the EEA in the last two years prior to the application or plans to do so in the two years following completion of the project.
- The aid must not be granted to a large undertaking in a 'c' area to subsidise their diversification into a new product or change in process within the same NACE / SIC code sector which they are currently active in.
- The investment / jobs created by the aid must be maintained in the region concerned for 5 years (3 years for SMEs) after the completion of the investment project.
- At least 25% of the financial contribution must come from sources free from public subsidy.
- The Company needs to provide written confirmation that they (at group level) have not made closures in that sector in the past two years and do not have concrete plans for closures within two years following the completion of the investment project.

In order for aid to be block exempted, aid must be for the initial investment.

Initial investment means capital spending relating to:

- the setting up of a new establishment;
- the extension of an existing establishment; or
- the starting up of an activity involving the production of products not previously produced in the establishment; or
- a fundamental change in the production process of an existing establishment; or
- acquisition of assets belonging to an establishment which closed or would have closed had it not have been purchased.

Further specific conditions apply dependent on the size of the enterprise and the area in which the activity is taking place:

- For SMEs in all assisted areas and non-SMEs in 107(3)(a) areas, regional aid given for 'Initial investment' is block exempted.
- For non-SMEs in 107(3)(c) areas, the block exemption for regional aid applies only to 'Initial investment in favour of new economic activities'.

Research, Development and Innovation

European regulations allow States to grant aid to enterprises for technology R+D activities with intervention rates depending on the size of the enterprise and the following activity types:

- **'fundamental research'** means experimental or theoretical work undertaken primarily to acquire new knowledge of the underlying foundations of phenomena and observable facts, without any direct commercial application or use in view;
- **'feasibility study'** means the evaluation and analysis of the potential of a project, which aims at supporting the process of decision-making by objectively and rationally uncovering its strengths and weaknesses, opportunities and threats, as well as identifying the resources required to carry it through and ultimately its prospects for success;
- **'industrial research'** means the planned research or critical investigation aimed at the acquisition of new knowledge and skills for developing new products, processes or services or for bringing about a significant improvement in existing products, processes or services. It comprises the creation of components parts of complex systems, and may include the construction of prototypes in a laboratory environment or in an environment with simulated interfaces to existing systems as well as of pilot lines, when necessary for the industrial research and notably for generic technology validation;
- **'experimental development'** means acquiring, combining, shaping and using existing scientific, technological, business and other relevant knowledge and skills with the aim of developing new or improved products, processes or services. This may also include, for example, activities aiming at the conceptual definition, planning and documentation of new products, processes or services;

Experimental development may comprise prototyping, demonstrating, piloting, testing and validation of new or improved products, processes or services in environments representative of real life operating conditions where the primary objective is to make further technical improvements on products, processes or services that are not substantially set. This may include the development of a commercially usable prototype or pilot which is necessarily the final commercial product and which is too expensive to produce for it to be used only for demonstration and validation purposes.

Experimental development does not include routine or periodic changes made to existing products, production lines, manufacturing processes, services and other operations in progress, even if those changes may represent improvements;

This table summarizes the GBER State Aid categories and maximum allowable intervention rates. Note these rates only apply to interventions which do not meet or exceed the notification threshold.

State Aid Category	Intervention rate		
	Small/ Micro	Medium	Large
Fundamental Research	100%	100%	100%
Feasibility study	70%	60%	50%
Industrial research	70%	60%	50%
Industrial research projects involving collaboration/ dissemination ²	80%	75%	65%
Experimental development	45%	35%	25%
Experimental development projects involving collaboration/dissemination ²	60%	50%	40%

Note 2: Collaborations between businesses and research organisations where the research organisation bears at least 10% of the costs & have the right to publish their own research, or business to business collaborations which involve more than one member state of the EU/ EEA or involve at least one SME, provided that no one business partner carries more than 70% of the project costs. Procurement/supplier relationships do not qualify.