



Reform of the Outer Space Act 1986

Consultation Document

Date Issued 31 May 2012

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Reform of the Outer Space Act 1986: Consultation

This consultation document seeks views of stakeholders on proposed changes to the Outer Space Act 1986, as promised in the Government Growth Review published in March 2011:

The Government intends to reform the Outer Space Act 1986 by introducing an upper limit on liability for UK operators.

It is likely to be of particular interest to members of: (i) the UK Space industry; and (ii) the UK public with an interest in UK space policy.

Issued: 31 May 2012

Respond by: 31 August 2012

Enquiries to:

Reform of the Outer Space Act 1986: Consultation
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1. Foreword by David Willetts, Minister for Universities and Science

Today, our everyday lives depend on space technology; it has become part of the economy in a way unimaginable just a few years ago. The global space sector continues to change rapidly and the UK must anticipate and react to new developments. The creation of the UK Space Agency allows the UK to embrace these changes and take advantage of the opportunities that lie ahead.

Government has a crucial role in creating opportunities for UK companies to succeed in overseas markets. As part of this we set out several commitments in the Growth Review which accompanied the Budget. This was the first review of its kind specifically to include the space sector.

One of these commitments was to reform the Outer Space Act 1986 – in order to help level the playing field for UK companies when competing for international business. Legislation currently requires unlimited liability from UK companies licensed under the Act. Furthermore, licensees have been required to obtain third party liability insurance of £100 million during both the launch and in-orbit phases of a mission.

Because of the time it would take to amend the Act, we concluded that a two part approach to the changes would be beneficial. Part one was completed on 4 July 2011 when I announced the reduction of the compulsory insurance requirement from £100 million to €60 million. This measure shows our determination to make the UK a more competitive base for space services and, allows firms to reinvest these cost savings.

This consultation deals primarily with part two, that is to cap the unlimited liability requirement to €60 million for the majority of missions. I therefore invite you to respond to this consultation. Whether you are in the space community, or have an interest in space, please let us know what you think. We will consider your views carefully before finalising the necessary changes.

Thank you for your help.

David Willetts

2. How to respond

When responding, please state whether you are responding as an individual or representing the views of an organisation. If responding on behalf of an organisation, please ensure it is clear whom the organisation represents and, where applicable, how the views of members were assembled.

Please send responses to:

Reform of the Outer Space Act 1986: Consultation
c/o Liz Cox
Business Development Manager
UK Space Agency
C204 Polaris House
North Star Avenue
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Wiltshire SN2 1SZ

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We do not intend to acknowledge receipt of individual responses unless explicitly requested by respondents.

Any enquiries about this document may be sent to the same address. If enquiries are from a representative body, please summarise the persons or organisations represented.

Please see section on confidentiality and data protection below.

3. Additional copies

You may make copies of this document without seeking permission. Further printed copies of the consultation document can be obtained from the address above.

An electronic version can be found on the UK Space Agency website at:

<http://www.bis.gov.uk/ukspaceagency/news-and-events/2012/May/reform-of-the-outer-space-act-1986-consultation>

We will arrange for alternative formats to be provided if necessary.

4. Confidentiality & Data Protection

Information provided in response to this consultation, including personal information, may be subject to publication or disclosure in accordance with the access to information regimes (these are primarily the Freedom of Information Act 2000 (FOIA), the Data Protection Act 1998 (DPA) and the Environmental Information Regulations 2004). If you want other information that you provide to be treated as confidential, please be aware that, under the FOIA, there is a statutory Code of Practice with which public authorities must comply and which deals, amongst other things, with obligations of confidence.

In view of this, it would be helpful if you could explain to us why you regard the information you have provided as confidential. If we receive a request for disclosure of the information we will take full account of your explanation, but we cannot give an assurance that confidentiality can be maintained in all circumstances. An automatic confidentiality disclaimer generated by your IT system will not, of itself, be regarded as binding on the Department.

The Department will process your personal data in accordance with the DPA and in the majority of circumstances this will mean that your personal data will not be disclosed to third parties.

5. Help with queries

Any comments or complaints about the conduct of this consultation should be addressed to:

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C204 Polaris House
North Star Avenue
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Wiltshire SN2 1SZ

Email: louise.bergin@ukspaceagency.bis.gsi.gov.uk

A copy of the Code of Practice on Consultation criteria is attached at Annex A.

6. What happens next?

The Government will publish a response to consultation within 3 months of the close of this consultation. After which a timetable for any reforms will be announced.

7. The Consultation

About the UK Space Agency

The UK Space Agency is at the heart of UK efforts to explore space, exploit space-based applications and technology and support our academic and industrial communities. The UK Space Agency was launched officially on 23 March 2010 and became an executive agency of BIS from 1 April 2011. The Agency is responsible for all strategic decisions on the UK civil space programme and provides a clear, single voice for UK space ambitions.

The UK Space Agency:

- co-ordinates UK civil space activity;
- supports academic research;
- nurtures the UK space industry;
- raises the profile of UK space activities at home and abroad;
- works to increase understanding of space and its practical benefits and;
- inspires our next generation of UK scientists and engineers.

BACKGROUND

The Outer Space Act

The Outer Space Act 1986 (OSA) is the legal basis for the regulation of activities in outer space carried out by organisations or individuals established in the UK or one of its Crown Dependencies or Overseas Territories. The aim of the OSA is to ensure compliance with the UK's obligations under international treaties and principles covering the use of outer space. One of these is the Liability Convention, under which the UK Government is ultimately liable for third party costs for accidental damage arising from UK space activities.

The licensing regime under the OSA enables the UK Government to offset some of the unlimited liability that falls to it. The UK has no indigenous launcher capability and activities licensed under the OSA are limited to:

- i. procuring the launch of a space object from an overseas launch service;
- ii. operating a space object; and
- iii. any activity in outer space.

Key aspects of current licensing are:

- ensuring financial health of licence applicants;
- ensuring that the activity does not pose risks to public health and safety or UK national security;
- a requirement on licensees to obtain third party liability insurance (usually to a minimum of €60 million) both during the launch and while the satellite is in operation; and
- an indemnity from the licensee to the Government against any proven third party costs resulting from the activities.

The latter point is as an unlimited liability on licensees.

What is the problem under consideration?

UK space operators have long argued that the unlimited liability placed upon them is very difficult to manage in terms of financing. Further, they say that these licence conditions

relating to insurance place them at a significant disadvantage when competing for business internationally. Given the global nature of the space industry this could result in work being lost to countries outside the UK.

The OSA has continued without amendment for over 20 years. The UK Space Agency has reviewed the Act and its licensing regime and identified areas where there is room for improvement. In particular, the treatment of contingent liabilities under the Act is now out of date and inconsistent with practice in other space faring nations and in other UK sectors that have comparable contingent liabilities (e.g. nuclear power, offshore oil).

THE PROPOSALS

The UK Space Agency has developed proposals to update the UK approach on the treatment of liability under the OSA. Under the proposals, the unlimited liability placed on satellite operators would be capped at €60 million, to be managed through a requirement for licensees to obtain a policy for third party insurance for the above amount (with HMG as a named insured), for the launch and in-orbit phases of the mission. Further, the capped liability and insurance requirement could be waived for the in-orbit operation only of a satellite that meets the criteria of a so-called “CubeSat”. It should be noted that under these proposals the UK Government would retain the flexibility to increase the liability cap / insurance requirement for any non-standard, high risk mission.

On the 4 July 2011, David Willetts announced that the insurance requirement would be reduced to €60 million with immediate effect. The announcement was well received by industry. The decision was informed by the Impact Assessment attached at Annex B and was possible because the level of required insurance is not governed by the OSA; it is a policy / technical judgement. The remaining changes outlined in the Impact Assessment would require secondary legislation, being achieved through a Legislative Reform Order.

It should be noted that this proposal goes beyond capping the liability under the Act and insurance reduction. The capped liability and insurance requirement could be waived for the in-orbit operation of a CubeSat (it would remain for the launch of the mission). This is assuming CubeSat licence applicants can demonstrate scientific or educational merit, which would be assessed on a case by case basis and the criteria could include:

- How well does the activity advance discovery and understanding while promoting teaching, training and learning?
- To what extent will it enhance the infrastructure for research and education?
- Will the results be disseminated broadly to enhance scientific and technological understanding?
- What may be the benefits of the proposed activity to society?

CubeSat licence applicants would also be expected to demonstrate they will adhere to space debris mitigation guidelines which propose a 25 year maximum orbital lifetime, details can be found at: http://www.osa.unvienna.org/pdf/publications/st_space_49E.pdf.

CubeSats are small fully functioning satellites with a standard size of 10x10x10cm and weigh in the region of 1kg. A standard CubeSat is often referred to as a ‘1U’ CubeSat, meaning one unit. They are scalable in 1U increments and ‘2U’ and ‘3U’ (30x10x10cm) have been built and launched. A 3U CubeSat is the maximum size that would be allowed under this proposal and the maximum weight would be limited to 5kg, including payload.

The objective of these proposals is to balance the risks to Government arising from UK space activity with the need to enable UK industry to exploit fully the opportunities available to them.

The Impact Assessment at Annex B provides details of the analysis underpinning the proposals and also the risks and benefits. However, the extract below provides a picture of what the net impact in monetary terms could be. It should be noted that within the Impact Assessment policy option 2 deals with capping the unlimited liability (including insurance reduction) and policy option 3 deals with the capped liability and insurance requirement being waived for the in-orbit operation of CubeSats.

Costs and benefits of policy options 2 and 3 and the combined impact

| | Costs | Benefits | Net Impact |
|-------------------------------|--------------------------|----------------------------|-------------------------|
| Option 2 | £1.3m + £110 per CubeSat | £7.4m + £23.5K per CubeSat | £6m + 23.5K per CubeSat |
| Option 3 (per CubeSat) | £130 | £95K | £95K |
| Options 2 & 3 | £1.3m + £130 per CubeSat | £7.4m + £95K per CubeSat | £6m + £95K per CubeSat |

Note: The values presented in this table are Net Present Values of the typical lifespan of a satellite. This is 11 years for a standard satellite. So, for example, the net impact of options 2 & 3 together is £6m over 11 years plus £95K per CubeSat, assuming the CubeSat is in orbit for two years.

Completion of the Impact Assessment has highlighted that there are a few areas that would benefit from being explored further. To this end a set of questions is posed in section 8, which seek to ensure that any decision is made on the basis of maximum knowledge and input from all stakeholders. You are free to address all or a subset of the questions and you may express views on related issues not specifically addresses in the questions.

8. Consultation questions

We look forward to receiving your responses to the questions raised in this consultation. You may answer as many or as few questions as you wish.

We recommend that you refer to the Impact Assessment at Annex B before answering the questions.

Question 1: What are the benefits of capping the unlimited liability requirement under the OSA to €60 million, for the majority of missions? Please detail how this might benefit you or your organisation and any wider benefits you perceive.

Question 2: Would the removal of the unlimited indemnity raise the prospect of moral hazard? For example private satellite operators may have less incentive to mitigate the risk of an incident which could lead to third party claims against them. Please give reasons for your response.

Question 3: What are the benefits of waiving the capped liability and insurance requirement for the in-orbit operation of a CubeSat that meets the specified criteria? Please detail how this might benefit you or your organisation and any wider benefits you perceive.

Question 4: If possible please give your best estimate on the number of UK registered CubeSats that may be launched in future if these proposals are adopted. When responding to this question provide any supporting evidence you have and comment on whether you think adoption of the proposals would make a significant difference to the number of CubeSats launched.

Question 5: Do you believe these proposals adequately balance the risks to Government arising from UK space activity, with the need to enable UK industry to exploit fully the opportunities available to them? If no please explain why.

Question 6: Do you think the key assumptions used in the Impact Assessment (set out on pages 12/13) are reasonable? Can you suggest any improvements to them? If so, please provide any supporting evidence.

Annex A: The Seven Consultation Criteria

Criterion 1 – When to consult

Formal consultation should take place at a stage when there is scope to influence the policy outcome.

Criterion 2 – Duration of consultation exercises

Consultations should normally last for at least 12 weeks with consideration given to longer timescales where feasible and sensible.

Criterion 3 – Clarity of scope and impact

Consultation documents should be clear about the consultation process, what is being proposed, the scope to influence and the expected costs and benefits of the proposals.

Criterion 4 – Accessibility of consultation exercises

Consultation exercises should be designed to be accessible to, and clearly targeted at, those people the exercise is intended to reach.

Criterion 5 – The burden of consultation

Keeping the burden of consultation to a minimum is essential if consultations are to be effective and if consultees' buy-in to the process is to be obtained.

Criterion 6 – Responsiveness of consultation exercises

Consultation responses should be analysed carefully and clear feedback should be provided to participants following the consultation.

Criterion 7 – Capacity to consult

Officials running consultations should seek guidance in how to run an effective consultation exercise and share what they have learned from the experience.

The complete code is available on the Department for Business, Innovation and Skills web site at: <http://www.bis.gov.uk/consultations>

Annex B: Impact Assessment of Reform of the Outer Space Act 1986

You can download the Impact Assessment from the link below:

<http://www.bis.gov.uk/assets/ukspaceagency/docs/osa/impact-assessment-reform-of-the-outer-space-act.pdf>