



# **Government Response to the Science and Technology Committee Report**

## **The Draft Spaceflight Bill**

Presented to Parliament  
by the Secretary of State for Transport  
by Command of Her Majesty

June 2017

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## Introduction

We welcome the Committee's report into the draft Spaceflight Bill which the Government now intends to introduce as the Space Industry Bill. We are keen to ensure proper parliamentary engagement, debate and scrutiny whilst retaining regulatory flexibility. We have made significant changes to delegated powers – removing some and increasing those subject to the affirmative procedure – to support this. Our response to the report's recommendations is set out below.

**Recommendation 1: If the next Government brings forward a bill to enable spaceflight activities from the UK, we would encourage it, for the sake of clarity and consistency, to work with industry to ensure that the terminology used reflects international norms as far as possible.**

Since the report, we have undertaken a comprehensive mapping exercise and now believe the terminology used in the Bill reflects international norms as much as possible. It should be noted, however, that agreed norms do not necessarily exist across and between the space and aviation industries.

Further, it should be noted that the Bill serves a particular legal purpose, as opposed to being a reference guide used by engineers 'in the field'. Where relevant, we have therefore used definitions based on the UN treaties covering outer space law. We have also expanded Explanatory Notes to aid understanding.

## Establishing a UK launch capacity

**Recommendation 2: We recommend that, if the next Government introduces a spaceflight-enabling bill, it also publishes a revised Impact Assessment which:**

- a) Includes a more detailed, monetised cost-benefit analysis; and**
- b) Provides clear evidence that there are launch operators who are serious about locating in the UK and that legislative change—rather than funding—is what is required to enable them to do so.**

An Impact Assessment (IA) covering the provisions in the Space Industry Bill was produced in September 2016 when these provisions were still part of the Modern Transport Bill. Since then, the underlying evidence base has not changed and so we have not updated the IA.

However, as part of the Government's Satellite Launch Programme, joint teams of UK spaceports and space launch vehicles operators were invited to enter proposals for public grant funding. A high number of proposals were received, showing the strong commercial interest in starting space launch operations from the UK. In particular, potential spaceports from England, Scotland and Wales provided proposals as they seek to capitalise on opportunities for industrial growth in remote regions.

Each of these proposals differs, and we are bound by commercial confidentiality arrangements not to disclose details. However it is expected that given the local and national interest in spaceflight, and the opportunities provided in terms of regional jobs and revenue, that local and devolved governments will be strongly supportive of efforts to support spaceflight in general. Officials from the Welsh and Scottish governments have been closely involved with developing proposals for spaceports in their respective countries.

The selection of bids for potential grant funding is continuing, with an independent expert panel meeting to score the proposals in early July. Once the independent panel's recommendations are known, further discussions will be held with the Bill team, devolved administrations and local governments before any public announcements are made.

In addition, we will produce IAs as part of the subsequent programme of secondary legislation.

## Licensing

**Recommendation 3: We recommend that any future spaceflight bill fully clarifies who would need an operator licence and whether licences will be issued on a mission by mission basis. Additional information should also be included in the Explanatory Notes accompanying the bill.**

We have revised the relevant Explanatory Notes. The note for Clause 3 (Prohibition of unlicensed spaceflight etc) now states: “This provision in subsection (1) prohibits the carrying out of space and sub-orbital activities and operation of a spaceport in the United Kingdom without a licence. The regulator will have a high degree of flexibility, so could, for instance, issue an operator licence for a specific mission or a class of missions. Different parties involved in a particular spaceflight activity may all require a licence. For instance, where there is the launch of a satellite to orbit – both the operator of the spacecraft that reaches orbit and the operator of the satellite will require licences for their space activities.”

**Recommendation 4: If, as we hope, the next Government introduces a spaceflight bill in the months ahead, we recommend that a memorandum of understanding between the European Aviation Safety Agency (EASA) and the Civil Aviation Authority is signed as soon as possible to cover the period while the UK is still a member of the European Union. This should confirm the conditions under which spaceflight would cease to be deemed ‘experimental’ by EASA and would start to be viewed as ‘commercial’.**

We have engaged with EASA from the outset of our work in early 2013, including the technical review on commercial spacecraft which was published in 2014 and more recently in our discussions about the Bill.

Throughout this period we have had a positive negotiation with both EASA and the European Commission, both in face to face discussion and in written confidential exchanges on our proposals to regulate commercial sub-orbital spacecraft. We are satisfied that both EASA and the Commission are content with UK proposals to develop national rules to regulate sub-orbital spacecraft since they consider that these would fall within derogations permitted under EASA aviation safety rules (in particular, derogations under the EASA Basic Regulations No. 216/2008).

In addition, and in accordance with EASA wishes, we will continue to share information with EASA and member states as this market matures to ensure the high regulatory standards are in place to support this activity across Europe.

## Liabilities, indemnities and insurance

**Recommendation 5: We recommend that, in line with the 1986 Outer Space Act, licences issued under a future spaceflight bill must specify the maximum amount of the licensee's liability to indemnify Government.**

**Recommendation 6: If the next Government introduces a spaceflight bill, it should indemnify claimants for losses exceeding any prescribed limits on operators' liability, and for any uninsured loss above a licensee's minimum required level of insurance. If the next Government introduces a spaceflight bill, it should indemnify claimants for losses exceeding any prescribed limits on operators' liability, and for any uninsured loss above a licensee's minimum required level of insurance.**

This matter will be subject to more detailed consultation and we intend to guidance on our approach to exercising any discretion to cap. Indications as to the level of any cap would form part of the engagement in a licensing application process.

It is the Government's view that the Bill should allow flexibility given the emerging state of this market, rather than binding any future operational policy decisions. Therefore, in relation to capping the indemnity to the UK Government under Clause 11(2) (Terms of licence) and indemnifying claimants under Clause 34(3) (Power of the Secretary of State to indemnify), this will remain as a "may" rather than "must". We appreciate that this means that the Space Industry Bill will a discretionary cap on an operator's indemnity to the UK Government whereas the Outer Space Act 1986 (OSA) has a mandatory cap (to be specified in a licence), although the amount of that cap is not specified in OSA. In addition, OSA only permits the capping of the operator's indemnity to the Government, but it contains no provision concerning the operator's liability to third parties. The liabilities scheme in the Bill is therefore more comprehensive.

**Recommendation 7: If a spaceflight bill is introduced by the next Government, we recommend that the current draft clause 30(2) be revised to ensure that it covers injury or damage caused to a person or to property that is airborne.**

We have revised this clause (Liability of licensees for injury or damage etc) (now clause 33) to ensure that it covers injury or damage caused to a person or to property that is airborne.

**Recommendation 8: We recommend that, if the next government brings forward a spaceflight bill, it considers granting a further exception to the currently-drafted clause 33 where it can be shown that a future regulator has acted with gross negligence. Provisions should also be included to regularly review the immunity provided under the legislation.**

The Department's view is that this would be an inappropriate test where the regulator is not assuring the safety of the vehicle or operation. The regulator also does not have international standards as a benchmark. The wilful misconduct test is a more appropriate test that will protect a regulator acting in good faith and this wording aligns with the US approach to regulation.

## Order-making powers

**Recommendation 9: If the next Government introduces a spaceflight bill with provision similar to the currently-drafted clause 14(4), it should clarify why it is needed and give examples of the purposes for which the Act might be modified. Given the potentially wide ranging nature of such modifications, parliamentary scrutiny is essential and the affirmative resolution procedure should be adopted in any future bill.**

We have reviewed the power under clause 14(4) and removed it from the Bill.

**Recommendation 10: Before any spaceflight bill is introduced, the next Government must address the inappropriate delegations of legislative power contained in the current draft Bill at clauses 21 and 51.**

We have reviewed clause 21 and removed it from the Bill.

We have reviewed what was clause 51 (Offences under regulations) (now clause 53) and amended the Bill so that this power is now subject to the affirmative procedure in the first instance and then negative thereafter. The nature of a regulatory offence cannot be known until the regulatory requirement in secondary legislation is enacted and any list of regulatory offences will evolve in parallel with the development of the regulatory requirements themselves. We propose setting out an illustrative schedule of related offences at a later stage of the Bill, providing reassurance that the scope of the delegation is appropriate.

**Recommendation 11: We recommend that if the next Government introduces a spaceflight bill it either removes clause 29 or restricts it to matters of national security and health and safety. If it opts for the latter, we recommend that it provides in the legislation for judicial scrutiny at an early stage after the grant of an authorisation, circumscribes carefully the actions which could be taken and reduces to a minimum the period for which an authorisation would be valid.**

We have reviewed clause 29 (Power to authorise entry in emergencies) (now clause 32) and believe it should apply to contraventions of international obligations as well as matters of national security and health and safety. This is because of the importance of space treaty obligations as well as potentially other forms of treaty obligation including bilateral agreements that may be reached to enable the export of sensitive technologies.

In line with the Committee's recommendation, we have reduced the period for which an authorisation would be valid from one month to 48 hours. This limits the Secretary of State's power and if a longer authorisation is required, it will be necessary to get a warrant from a Justice of the Peace under clause 31 (Warrants authorising entry or direct action).



**Recommendation 12: If the next Government introduces a spaceflight bill it should, at the same time, produce illustrative draft regulations to assist Parliament's scrutiny of its provisions.**

In recognition of the Committee's recommendation, we will provide further detail of how we intend to use the powers at subsequent stages of the Bill. Further engagement and consultation with industry and competent authorities in other states is being undertaken to develop detailed regulations, a draft of which will be made available in due course.

We have also taken on board many recommendations made by the Delegated Powers and Regulatory Reform Committee (DPRRC), in their report for the Science and Technology Committee, which sought more use of the affirmative procedure, in particular.

In addition and as set out in the Delegated Powers Memorandum, further powers will be subject to either the affirmative procedure at every use or affirmative procedure at first use, allowing further Parliamentary scrutiny. We have proposed the affirmative procedure at first use in some cases because the Department considers that the affirmative procedure will offer robust scrutiny when the initial frameworks under these powers are first developed. However, subsequently, it may be necessary to amend regulations quickly and frequently as the regulatory experience develops, without taking up a disproportionate amount of Parliamentary debating time.

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