



Draft Spaceflight Bill





Draft Spaceflight Bill

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

February 2017

Cm 9421



© Crown copyright 2017

This publication is licensed under the terms of the Open Government Licence v3.0 except where otherwise stated. To view this licence, visit <u>nationalarchives.gov.uk/doc/open-government-licence/version/3</u> or write to the Information Policy Team, The National Archives, Kew, London TW9 4DU, or email: <u>psi@nationalarchives.gsi.gov.uk</u>

Where we have identified any third party copyright information you will need to obtain permission from the copyright holders concerned.

This publication is available at www.gov.uk/government/publications

Print ISBN 9781474140959 Web ISBN 9781474140966

ID 2862040 02/17

Printed on paper containing 75% recycled fibre content minimum

Printed in the UK by the Williams Lea Group on behalf of the Controller of Her Majesty's Stationery Office

Foreword

The UK has a proud history of exploration, of science and of commerce, including over half a century in space. With millions inspired by Tim Peake's mission last year, and ambitious plans underway to study and explore the Solar System, our future in space is bright.

But that future is not just about exploration and research - space applications are already an indispensable part of our daily lives.

Satellites connect us to the digital world through mobile technologies and broadband, and satellite navigation powers modern transport systems, keeping ships, trains and aircraft safe and improving the way we travel. Satellites can help us find a new restaurant or help decide whether we should carry an umbrella when we leave the house.

The UK is a world-leader in satellite technology and services, particularly in designing and building innovative small satellites. Our space industry is worth more than £13.7 billion to the UK economy already, employing more than 38,500 people directly, and supporting more than 110,000 jobs across the wider economy.

As we prepare to leave the European Union and so redefine our place in the world, we must ensure that the decisions we take now put the UK in a position to build a strong, resilient, well balanced economy that works for everyone.

The Government's Industrial Strategy recognises the opportunity that new technologies and new markets such as commercial space flight will play in strengthening our economy.

The UK's geography and our highly-skilled engineering workforce mean we are well-placed to become the first country to provide a hub for low cost launch of small satellites in Europe, capturing a portion of a potential £25 billion global market.

We want to see UK spaceports enabling the launch of small satellites from the UK, as well as sub-orbital spaceflights and scientific experiments. Our new laws will put British businesses at the forefront of these new space services and create jobs in communities that have not previously considered themselves to be part of our space sector.

This legislation will see the Department for Transport and the Department for Business, Energy and Industrial Strategy, the UK Space Agency, the Civil Aviation Authority and the Health and Safety Executive working together to regulate and oversee commercial spaceflight operations in the UK. This draft spaceflight legislation will be fundamental to enabling safe and cost-effective access to space from the UK so creating high-value jobs and economic benefits across the country. It is important we get this complex new legislation right to create a safe, competitive and sustainable commercial spaceflight market.



I dhind of Winkhed



Lord Ahmad

John Hayes



Lord Prior



Free John Jon

Jo Johnson

Draft Spaceflight Bill

CONTENTS

Regulation of spaceflight etc

- 1 Introduction and main definitions
- 2 Duties and supplementary powers of the regulator
- 3 Prohibition of unlicensed spaceflight etc

Range control

- 4 Range
- 5 Range control services
- 6 Provision of range control services

Licences

- 7 Grant of licences: general
- 8 Grant of operator licences: safety
- 9 Grant of spaceport licence
- 10 Terms of licences
- 11 Conditions of licences
- 12 Licences granted for specified periods
- 13 Transfer, variation, suspension or termination of licence

Exercise of regulatory functions by bodies other than Secretary of State

14 Power of Secretary of State to appoint person to exercise functions

Individuals taking part in spaceflight activities etc

- 15 Informed consent
- 16 Training, qualifications and medical fitness

Safety

- 17 Safety regulations
- 18 Investigation of accidents
- 19 Assistance etc with performance of regulator's safety functions

Security

- 20 Security regulations
- 21 Power to grant exemption from security requirements
- 22 Spaceport byelaws
- 23 Provision of advice and assistance on security matters

Enforcement etc

- 24 Monitoring and enforcement by regulator
- 25 Power to give directions: breach of licence condition etc
- 26 Power to give directions in the interests of safety, security etc
- 27 Further provision about directions
- 28 Warrants authorising entry or direct action
- 29 Power to authorise entry in emergencies

Liabilities, indemnities and insurance

- 30 Liability of licensee for injury or damage etc
- 31 Power of Secretary of State to indemnify
- 32 Obligation to indemnify government etc against claims
- 33 Regulator etc not liable in respect of spaceflight-related actions
- 34 Insurance

Powers in relation to land: acquisition of land etc

- 35 Powers to obtain rights over land
- 36 Orders under section 35: offences
- 37 Power to restrict use of land to secure safety
- 38 Power to exercise control over land in interests of spaceflight activities
- 39 Orders under section 38: consequential amendments of local Acts
- 40 Power of entry for purposes of survey
- 41 Entry to land for survey: compensation
- 42 Registration of orders, etc under sections 35 and 37

Powers in relation to land: supplementary

- 43 Special provisions relating to statutory undertakers
- 44 Displacements from land
- 45 Compensation in respect of planning decisions relating to spaceport safety etc: England and Wales and Scotland
- 46 Compensation in respect of planning decisions relating to spaceport safety etc: Northern Ireland
- 47 Powers in relation to land: notices

Offences and civil sanctions

- 48 Application of criminal law to spacecraft
- 49 Offences on board spacecraft: supplementary
- 50 Penalties for offences under this Act
- 51 Offences under regulations
- 52 Offences under regulations: extended time limit in case of accident investigation etc
- 53 Defences
- 54 Offences by bodies corporate and partnerships

55 Civil sanctions

Appeals

56 Appeals

Miscellaneous

- 57 Charging schemes
- 58 Provision of advice and assistance by or to an appointed person
- 59 Co-operation between Secretary of State and other bodies
- 60 Agreements with other countries: compliance with requirements etc
- 61 Use of records and documentary evidence

General

- 62 Minor and consequential amendments
- 63 Regulations: general
- 64 Interpretation
- 65 Commencement
- 66 Extent
- 67 Short title
 - Schedule 1 Particular conditions that may be included in licences
 - Schedule 2 Training regulations: further provision
 - Schedule 3 Safety regulations: further provision
 - Schedule 4 Security regulations: further provision
 - Schedule 5 Orders under sections 35 and 37
 - Schedule 6 Provisions relating to orders and directions under 38
 - Schedule 7 Powers in relation to land: special provisions relating to statutory undertakers
 - Part 1 Compensation
 - Part 2 Adjustment of the functions of statutory undertakers

Schedule 8 – Appeals in connection with space activities

- Part 1 The appeal panel
- Part 2 Rights of appeal
- Part 3 Determination of appeal
- Part 4 Procedure
- Part 5 Fees
- Schedule 9 Charging schemes
- Schedule 10 Minor and consequential amendments

DRAFT OF A **B I L L** TO

Make provision about space activities and sub-orbital activities, and for connected purposes.

B E IT ENACTED by the Queen's most Excellent Majesty, by and with the advice and consent of the Lords Spiritual and Temporal, and Commons, in this present Parliament assembled, and by the authority of the same, as follows: –

Regulation of spaceflight etc

1 Introduction and main definitions

- (1) This Act has effect for the purpose of regulating
 - (a) space activities,
 - (b) sub-orbital activities, and
 - (c) associated activities,

carried out in the United Kingdom.

(2) In this Act -

"carrier aircraft" means an aircraft that is used or (as the case may be) is to be used to carry a spacecraft;

"space activity" means –

- (a) launching or procuring the launch or the return to earth of a space object or of an aircraft carrying a space object,
- (b) operating a space object, or
- (c) any activity in outer space;
- "spacecraft" means a space object, or a craft to which subsection (3) applies, that is used or (as the case may be) is to be used for the purpose of spaceflight activities;
- "spaceflight activities" means space activities and sub-orbital activities;
- "spaceport" means a site from which spacecraft or carrier aircraft are launched or (as the case may be) are to be launched;

1

"sub-orbital activity" means launching, procuring the launch of, operating or procuring the return to earth of -

- (a) a craft to which subsection (3) applies, or
- (b) an aircraft carrying such a craft,

but does not include space activity.

- (3) This subsection applies to
 - (a) a rocket or other craft that is capable of operating above the stratosphere;
 - (b) a balloon that is capable of reaching the stratosphere carrying crew or passengers.
- (4) For the purposes of this section, carrying a spacecraft
 - (a) includes carrying a craft that itself carries a spacecraft;
 - (b) does not include transporting a spacecraft from one place to another with no intention of launching it at that time.
- (5) In this Act, a reference to launching a craft includes a reference to
 - (a) causing it to take off, or
 - (b) (in the case of a balloon) releasing it,

and "launch" (as a noun) is to be read accordingly.

2 Duties and supplementary powers of the regulator

- The regulator must exercise the regulator's functions with regard to spaceflight activities with a view to securing public safety.
 That duty has priority over the application of subsections (2) and (3).
- (2) The regulator must exercise the regulator's functions under this Act in the way that the regulator thinks best calculated to take into account
 - (a) the interests of persons carried by spacecraft or carrier aircraft;
 - (b) the requirements of persons carrying out spaceflight activities;
 - (c) the interests of any other persons in relation to the use of land, sea and airspace;
 - (d) the requirements of persons with interests in property carried by spacecraft;
 - (e) any environmental objectives set by the Secretary of State;
 - (f) the interests of national security;
 - (g) any international obligations of the United Kingdom.
- (3) If in a particular case there is a conflict in the application of the provisions of subsection (2), in relation to that case the regulator must apply them in whatever way the regulator thinks reasonable having regard to the provisions as a whole.
- (4) The regulator may do anything that is calculated to facilitate, or is conducive or incidental to, the performance of any of the regulator's functions under this Act.
- (5) The power in subsection (4) is subject to any restrictions imposed by or under any enactment.

3 Prohibition of unlicensed spaceflight etc

- (1) A person must not (subject to the following provisions)
 - (a) carry out spaceflight activities in the United Kingdom, or
 - (b) operate a spaceport in the United Kingdom,

except under the authority of a licence under this section.

- (2) In this Act -
 - "operator licence" means a licence under this section authorising a person to carry out spaceflight activities;
 - "spaceport licence" means a licence under this section authorising a person to operate a spaceport.
- (3) A person does not require an operator licence
 - (a) to carry out, as employee or agent of another person, spaceflight activities that are authorised by an operator licence granted to that other person;
 - (b) to carry out spaceflight activities in respect of which it is certified by Order in Council that arrangements have been made between the United Kingdom and another country to secure compliance with the international obligations of the United Kingdom.
- (4) Regulations may exempt other persons or activities from the requirement to hold an operator licence, but only if the Secretary of State is satisfied that the requirement
 - (a) is not necessary to secure public safety, and
 - (b) is not necessary to secure compliance with the international obligations of the United Kingdom.
- (5) Regulations under subsection (4) may
 - (a) provide that section 32 (obligation to indemnify government etc) does not apply to a person to the extent that the person is carrying out activities that do not require an operator licence by virtue of the regulations;
 - (b) specify the maximum amount of a person's liability under that section so far as the liability relates to the carrying out of activities that do not require an operator licence by virtue of the regulations.
- (6) Regulations may make further provision for the purposes of this section, including in particular
 - (a) provision prescribing eligibility criteria for a licensee;
 - (b) provision requiring prescribed roles to be undertaken by individuals on behalf of a licensee.

"Licensee" here means the holder of a licence under this section.

- (7) A person who acts in contravention of subsection (1) commits an offence.
- (8) It is an offence for a person
 - (a) to make a statement that the person knows to be false in a material particular, or
 - (b) recklessly to make a statement that is false in a material particular,

for the purpose of obtaining a licence under this section (whether for the person making the statement or anyone else).

Range control

4 Range

- (1) In this Act "range", in relation to spaceflight activities, means a zone that is subject to restrictions or exclusions for keeping it clear, at the relevant times, of
 - (a) persons or things that might pose a hazard to those activities, and
 - (b) persons or things to which those activities might pose a hazard.

"Zone" here means a volume of airspace and, to the extent necessary, an area of land or sea.

- (2) Regulations may make provision about range for spaceflight activities, including in particular
 - (a) provision as to matters to be taken into account in establishing the range;
 - (b) provision imposing requirements on persons in relation to the operation of the range;
 - (c) provision requiring a person providing range control services (see sections 5 and 6) to notify prescribed persons of spaceflight activities taking place within the range.
- (3) The power of the Secretary of State under section 66 of the Transport Act 2000 (air navigation: directions) to give directions to the CAA includes power to give directions imposing duties or conferring powers (or both) on the CAA with regard to range for spaceflight activities.

5 Range control services

- (1) For the purposes of this Act the following are "range control services"
 - (a) establishing an appropriate range for particular spaceflight activities;
 - (b) co-ordinating arrangements for the activation and operation of the range;
 - (c) obtaining all necessary information for establishing the range and for co-ordinating its activation and operation;
 - (d) ensuring that notifications are issued for the protection of persons who might be put at risk by spacecraft or carrier aircraft within the range or in the vicinity of it;
 - (e) monitoring the range, and the spacecraft or carrier aircraft for which it is provided, to ascertain—
 - (i) whether the restrictions or exclusions to which the range is subject are complied with;
 - (ii) whether planned trajectories are adhered to;
 - (f) communicating any failure to comply with those restrictions or exclusions, or to adhere to those trajectories, for the purpose of enabling any appropriate actions to be taken in response;
 - (g) any prescribed services provided for the purposes of, or in connection with, services within any of paragraphs (a) to (f).
- (2) Services prescribed under subsection (1)(g) must relate to
 - (a) safety systems,
 - (b) facilities or infrastructure (including facilities or infrastructure relating to ground control, communications, transport, power, handling of

hazardous materials, environmental protection, emergency response or security),

- (c) planning, scheduling or co-ordination of activities or operations, or
- (d) meteorological information.

6 Provision of range control services

- (1) Range control services may be provided only by
 - (a) the Secretary of State, or
 - (b) a person authorised to provide them by a range control licence.
- (2) In this Act-

"range control licence" means a licence under this section;

"range controller" means the holder of a range control licence;

"range control service provider" means a person providing range control services.

- (3) A person does not require a range control licence to provide, as employee or agent of another person, range control services the provision of which is authorised by a range control licence granted to that other person.
- (4) Regulations may exempt persons or services from the prohibition in subsection
 (1) on unlicensed persons providing range control services, but only if the Secretary of State is satisfied that the prohibition
 - (a) is not necessary to secure public safety, and
 - (b) is not necessary to secure compliance with the international obligations of the United Kingdom.
- (5) Regulations may make further provision for the purposes of this section, including in particular
 - (a) provision prescribing eligibility criteria for a range controller;
 - (b) provision about the circumstances in which, and the conditions subject to which, a person may be authorised to provide range control services for spaceflight activities carried out by that person;
 - (c) provision for securing the independence of individuals involved in the provision of range control services from individuals involved in the spaceflight activities for which the services are provided;
 - (d) provision as to how range control services are to be provided;
 - (e) provision requiring prescribed roles to be undertaken by individuals on behalf of a range controller;
 - (f) provision imposing restrictions on a range controller delegating the provision of range control services.
- (6) A person who acts in contravention of subsection (1) commits an offence.
- (7) It is an offence for a person
 - (a) to make a statement that the person knows to be false in a material particular, or
 - (b) recklessly to make a statement that is false in a material particular,

for the purpose of obtaining a range control licence (whether for the person making the statement or anyone else).

Licences

7 Grant of licences: general

- (1) Subject to the following provisions of this Act, the regulator may grant a licence under this Act if the regulator thinks fit.
- (2) The regulator may grant a licence under this Act only if satisfied that doing so
 - (a) will not impair the national security of the United Kingdom;
 - (b) is consistent with the international obligations of the United Kingdom;
 - (c) is not contrary to the national interest.
- (3) The regulator may not grant an application for a licence under this Act unless satisfied that
 - (a) the applicant has the financial and technical resources to do the things authorised by the licence, and is otherwise a fit and proper person to do them;
 - (b) the persons who are expected to do, on the applicant's behalf, any of the things authorised by the licence are fit and proper persons to do them.
- (4) If the regulator is not the Secretary of State, the regulator may grant a licence under this Act only with the consent of the Secretary of State.
- (5) Regulations may make provision about how applications for licences are to be made, considered and determined.
- (6) The regulations may in particular prescribe, or provide for a person responsible for determining an application to specify
 - (a) the form and contents of an application for a licence;
 - (b) information to be provided in connection with an application;
 - (c) the procedure for rectifying procedural irregularities;
 - (d) time limits for doing anything required to be done in connection with an application and the procedure for extending any period so prescribed.
- (7) The regulations may also provide for
 - (a) the inspection of sites, facilities, equipment, spacecraft, carrier aircraft and other vehicles, and
 - (b) the obtaining of information (whether by inspecting documents, interviewing individuals or otherwise),

by prescribed persons or persons of prescribed descriptions.

8 Grant of operator licences: safety

- (1) The regulator must not grant an application for an operator licence unless satisfied that the requirements in subsections (2) to (4) are met.
- (2) The applicant must have carried out an assessment of the risks to the health and safety of individuals who are to take part in a prescribed role or capacity in the activities to be authorised by the licence (a "risk assessment").
- (3) The risk assessment must meet prescribed requirements.
- (4) As regards risks to the health, safety and property of persons not within subsection (2) –

- (a) the applicant must have taken all reasonable steps to ensure that those risks are as low as reasonably practicable;
- (b) the level of those risks must be acceptable.
- (5) Regulations may make provision about
 - (a) matters to be taken into account, and other requirements to be met, in carrying out risk assessments;
 - (b) steps to be taken under subsection (4)(a);
 - (c) how acceptable levels of risk are to be determined for the purposes of subsection (4)(b).
- (6) Regulations may require information to be provided to the regulator for the purposes of the regulator's functions under this section.
- (7) The Secretary of State may issue guidance about what an applicant may or must do in order for the regulator to be satisfied that the requirements in subsections (2) to (4) are met.
 Such guidance may also be issued by the regulator (if the regulator is not the

Such guidance may also be issued by the regulator (if the regulator is not the Secretary of State).

- (8) In carrying out functions under this section, the regulator (if the regulator is not the Secretary of State) must have regard
 - (a) to any guidance given to the regulator by the Secretary of State as to how those functions are to be exercised;
 - (b) to any guidance issued by the Secretary of State under subsection (7).
- (9) For the purposes of this Act, taking part in spaceflight activities includes being carried in a spacecraft or carrier aircraft without being involved in the operation of it.

9 Grant of spaceport licence

The regulator must not grant an application for a space port licence unless satisfied that -

- (a) the applicant has taken all reasonable steps to ensure that risks to public safety arising from the operation of the spaceport are as low as reasonably practicable, and
- (b) any prescribed criteria or requirements are met.

10 Terms of licences

- (1) An operator licence may authorise the licensee to carry out
 - (a) any spaceflight activities, or
 - (b) spaceflight activities of a particular description, or
 - (c) one or more particular spaceflight activities.
- (2) An operator licence may specify a limit on the amount of the licensee's liability under section 32 in respect of the activities authorised by the licence.
- (3) A spaceport licence must identify the site in respect of which the licence is granted.
- (4) A spaceport licence may
 - (a) authorise the operator of the spaceport to carry out launch activities at the spaceport, or

- (b) authorise the use of the spaceport for the carrying out, by another person, of launch activities which that person is authorised to carry out by an operator licence.
- (5) In subsection (4) "launch activities" means
 - (a) spaceflight activities,
 - (b) spaceflight activities of a particular description, or
 - (c) one or more particular spaceflight activities,

involving the launch of spacecraft or carrier aircraft.

- (6) A range control licence may authorise the licensee to provide
 - (a) any range control services, or
 - (b) range control services of a particular description, or
 - (c) particular range control services.

11 Conditions of licences

- (1) A licence under this Act may be granted subject to
 - (a) any conditions of the kinds described in Schedule 1, or
 - (b) any other conditions,

that the regulator thinks appropriate.

- (2) In that Schedule "specified" means specified, or of a description specified, in the licence.
- (3) Regulations may provide for the regulator, in deciding what conditions to include in a licence under this Act, to accept or recognise
 - (a) a licence, authorisation or approval, under the law of a designated country outside the United Kingdom, concerning a matter that is relevant to the regulator's decision, or
 - (b) the outcome of any process undertaken in connection with an application for any such licence, authorisation or approval.

In this subsection "designated country" means a country specified in the regulations or (if the regulations so provide) designated by the Secretary of State in accordance with the regulations.

- (4) Regulations may specify matters
 - (a) to be included in any conditions imposed under this section,
 - (b) to be enforced by means of any such conditions, or
 - (c) to be taken into account in framing any such conditions.
- (5) In deciding what conditions to include in a licence under this Act, the regulator
 - (a) must consult the CAA (if the regulator is not the CAA);
 - (b) must consult the Secretary of State (if the regulator is not the Secretary of State);
 - (c) must consult the Health and Safety Executive (in the case of a spaceport in Great Britain) or the Health and Safety Executive for Northern Ireland (in the case of a spaceport in Northern Ireland);
 - (d) must consult the Office for Nuclear Regulation;
 - (e) must consult the Defence Safety Authority;

- (f) must consult whatever other persons the regulator thinks appropriate if the proposed licence gives rise to any issues regarding trade controls or national security.
- (6) Regulations may prescribe what the holder of a licence under this Act may or must do in order to comply with prescribed kinds of licence conditions.
- (7) It is an offence for the holder of a licence under this Act to fail to comply with a condition of the licence.

12 Licences granted for specified periods

- (1) A licence under this Act may be granted for a period specified in the licence.
- (2) A licence under this Act granted for a specified period may be renewed by the regulator, on the application of the licensee, for a further specified period.
- (3) If the regulator is not the Secretary of State, the regulator must consult the Secretary of State before renewing a licence under this Act.
- (4) Sections 7 to 11, and other provisions of this Act about licences, apply in relation to the renewal of a licence as they apply in relation to the grant of a licence.

13 Transfer, variation, suspension or termination of licence

- (1) A licence under this Act may be transferred with the written consent of the person who granted it ("the licensor") or in a prescribed case.
- (2) The licensor may revoke, vary or suspend a licence under this Act
 - (a) with the consent of the licensee,
 - (b) in accordance with the terms of the licence, or
 - (c) where the licensor is satisfied it is necessary to do so
 - (i) in the interests of safety,
 - (ii) in the interests of national security,
 - (iii) to comply with any international obligation of the United Kingdom, or
 - (iv) otherwise in the national interest.
- (3) The licensor may revoke or vary a licence under this Act where it appears to the licensor that
 - (a) a condition of the licence has not been complied with, or
 - (b) the licensee has failed to comply with, or to secure compliance with, obligations imposed under or by virtue of any enactment.
- (4) Where it appears to the licensor that an investigation or review is needed to ascertain whether or not
 - (a) it is necessary to revoke or vary a licence under subsection (2)(c), or
 - (b) paragraph (a) or (b) of subsection (3) applies,

the licensor may vary or suspend the licence pending the outcome of the investigation or review.

- (5) If the licensor is not the Secretary of State, the licensor must consult the Secretary of State
 - (a) before revoking a licence under this Act,

- (b) before varying such a licence (otherwise than under subsection (4)), or
- (c) before consenting to the transfer of such a licence.
- (6) The suspension, revocation or expiry of a licence does not affect the obligations of the licensee under the conditions of the licence.
- (7) For the purposes of this section, varying a licence includes
 - (a) removing, varying or suspending a condition of a licence;
 - (b) adding a new condition to a licence.

Exercise of regulatory functions by bodies other than Secretary of State

14 Power of Secretary of State to appoint person to exercise functions

- (1) The Secretary of State may by regulations appoint the CAA or another person (the "appointed person") to exercise any function conferred by or under this Act that is expressed (in whatever way) to be a function of the regulator.
- (2) A person may be appointed
 - (a) to exercise a function for prescribed purposes, in relation to prescribed activities or services or in relation to prescribed areas;
 - (b) to exercise a function instead of, or concurrently with, the Secretary of State;
 - (c) to exercise a function subject to prescribed conditions;
 - (d) to exercise a function for a prescribed period.
- (3) More than one person may be appointed.
- (4) Regulations under this section may provide for provisions of this Act to apply with any modifications that the Secretary of State thinks necessary or appropriate.
- (5) In sections 2 and 13 as they apply to an appointed person
 - (a) a reference to environmental objectives set by the Secretary of State is a reference to environment objectives notified to the appointed person by the Secretary of State;
 - (b) a reference to the interests of national security or international obligations of the United Kingdom is a reference to such interests or obligations that are notified to the appointed person by the Secretary of State.
- (6) The Secretary of State may give to an appointed person any directions that the Secretary of State considers to be necessary or expedient
 - (a) in the interests of national security, or
 - (b) otherwise in the national interest.
- (7) If the CAA is appointed by virtue of this section to exercise functions under this Act, section 4 of the Civil Aviation Act 1982 (CAA's general objectives) does not apply in relation to its performance of those functions.
- (8) This section does not affect the Secretary of State's powers to enter into agreements or arrangements for the exercise by others of functions of the Secretary of State on his or her behalf.
- (9) In this Act (except in subsection (1)) "the regulator" –

- (a) in relation to functions that (by virtue of regulations under this section) are exercisable by an appointed person instead of the Secretary of State, means that person;
- (b) in relation to functions that (by virtue of those regulations) are exercisable by an appointed person concurrently with the Secretary of State, means that person or the Secretary of State;
- (c) in relation to functions that are not exercisable by an appointed person, means the Secretary of State.

Individuals taking part in spaceflight activities etc

15 Informed consent

- (1) The holder of an operator licence must not allow an individual to take part, in a prescribed role or capacity, in spaceflight activities carried out by the licensee unless the individual
 - (a) has signified his or her consent to accept the risks involved in those activities, and
 - (b) fulfils prescribed criteria with respect to age and mental capacity.
- (2) Consent to accept the risks involved in spaceflight activities must be signified by signing a document (a "consent form") that gives details of the risk assessment carried out for those activities under section 8.
- (3) Regulations may make
 - (a) provision about the form and content of consent forms;
 - (b) provision about information to be given to individuals before they sign consent forms;
 - (c) provision imposing evidential and procedural requirements with regard to the signification of consent.
- (4) It is an offence for a licensee to contravene subsection (1).

16 Training, qualifications and medical fitness

- (1) Regulations (referred to in this Act as "training regulations") may make provision with respect to the training, qualifications and medical fitness of individuals—
 - (a) taking part in, or otherwise engaged in connection with, spaceflight activities or the provision of range control services, or
 - (b) working at sites used for or in connection with spaceflight activities or the provision of range control services.
- (2) The holder of a licence under this Act must not allow an unqualified individual to take part in, or to be otherwise engaged in connection with
 - (a) activities authorised by the licence, or

(b) providing services the provision of which is authorised by the licence, in a specified role or capacity.

(3) The holder of a licence under this Act must not allow an unqualified individual to work in a specified role or capacity at a site used for or in connection with the activities or services to which the licence relates.

- (4) For the purposes of subsections (2) and (3) an individual is "unqualified" if he or she does not fulfil specified criteria with respect to training, qualifications and medical fitness.
- (5) In this section "specified" means specified in training regulations.
- (6) It is an offence for the holder of a licence under this Act to contravene subsection (2) or (3).
- (7) An individual commits an offence if
 - (a) a person commits the offence in subsection (6), and
 - (b) the person's commission of that offence is due to an act or default of the individual.

The individual is liable to be proceeded against and dealt with accordingly.

- (8) For the purposes of subsection (7) it does not matter whether or not proceedings are taken against the person committing the offence in subsection (6).
- (9) Schedule 2 gives examples of particular kinds of provisions that may be made by training regulations.

That Schedule does not limit subsections (1) to (4).

Safety

17 Safety regulations

- (1) Regulations (referred to in this Act as "safety regulations") may make provision for the purposes of
 - (a) securing the safe operation of spaceports and mission management facilities;
 - (b) securing that spaceflight activities are carried out safely;
 - (c) securing that the range for spaceflight activities enables the activities to be carried out safely.
- (2) Schedule 3 gives examples of particular kinds of provision that may be made by safety regulations.
 That Schedule does not limit subsection (1)

That Schedule does not limit subsection (1).

18 Investigation of accidents

- Regulations may provide for the investigation of accidents, whether occurring in the United Kingdom or elsewhere, arising out of or in the course of spaceflight activities (including activities to which the Outer Space Act 1986 applies).
- (2) Regulations under this section may
 - (a) make provision corresponding to that which may be made by virtue of subsection (3) of section 75 of the Civil Aviation Act 1982 (investigation of accidents);
 - (b) make provision entitling a person who incurs expenses in, or in connection with, carrying out an investigation under the regulations to recover those expenses from prescribed persons.

This subsection does not limit subsection (1).

- (3) In this section "accident" includes any fortuitous or unexpected event by which the safety of any spacecraft or person is threatened.
- (4) This section does not limit the powers of any authority under sections 245 to 247 and sections 252 to 254 of the Merchant Shipping Act 1995.

19 Assistance etc with performance of regulator's safety functions

- (1) The regulator may
 - (a) require a qualifying health and safety authority to provide any specified advice or assistance, to the regulator or any other person, in connection with any functions relating to safety that are conferred on the regulator by or under this Act;
 - (b) authorise a qualifying health and safety authority to perform on behalf of the regulator any such functions that are specified.
- (2) In this section –

"qualifying health and safety authority" means –

- (a) the Health and Safety Executive or (as appropriate) the Health and Safety Executive for Northern Ireland;
- (b) the Office for Nuclear Regulation;
- (c) a prescribed body or person whose functions consist of or include functions of a public nature relating to safety;

"specified" means specified in the requirement under subsection (1)(a) or the authorisation under subsection (1)(b).

- (3) A requirement imposed under subsection (1)(a) to provide advice or assistance in connection with any function may be expressed so as to operate as a continuing requirement on the qualifying health and safety authority to provide advice or assistance in connection with that function.
- (4) Where under subsection (1)(a) the regulator
 - (a) requires a qualifying health and safety authority to provide advice or assistance for a person other than the regulator, but
 - (b) does not undertake to pay the authority the cost of doing so,

the authority may refuse to do so until the other person pays to the authority any reasonable charges in respect of the advice or assistance that the authority determines.

- (5) A qualifying health and safety authority is entitled to recover from the regulator a sum equal to any expense reasonably incurred by the authority
 - (a) in providing the regulator with advice or assistance in response to a requirement imposed under subsection (1)(a), or
 - (b) in performing a function that the authority is authorised to perform under subsection (1)(b).
- (6) Regulations may prescribe functions that the regulator may not authorise a qualifying health and safety authority to perform under subsection (1)(b).

Security

20 Security regulations

- (1) Regulations (referred to in this Act as "security regulations") may make provision for the purpose of ensuring security in relation to
 - (a) spaceflight activities;
 - (b) range control services;
 - (c) activities associated with spaceflight activities or range control services;
 - (d) sites and facilities used for or in connection with activities and services within paragraph (a), (b) or (c) (including sites and facilities used for training purposes);
 - (e) spacecraft and their payloads.
- (2) Schedule 4 gives examples of particular kinds of provision that may be made by security regulations.

That Schedule does not limit subsection (1).

- (3) In that Schedule "space site" means
 - (a) a spaceport;
 - (b) a mission management facility;
 - (c) a site used in connection with the provision of range control services.
- (4) Security regulations may confer power on the Secretary of State, if satisfied that it is necessary to do so by reason of the operational requirements of the armed forces of the Crown, to suspend the application of any requirement or restriction under the regulations in relation to an aerodrome occupied for the purposes of those forces.

21 Power to grant exemption from security requirements

- (1) The regulator may by notice to the relevant person exempt a particular activity, service, site, facility or other thing mentioned in section 20(1) from a requirement or other provision that
 - (a) is imposed by or under this Act or any other enactment, and
 - (b) would otherwise apply to that activity, service, site, facility or thing for the purpose of protecting it against the risk of unlawful interference,

if satisfied that adequate alternative measures to mitigate that risk are in place.

- (2) In subsection (1) "the relevant person"
 - (a) in relation to a spaceport, means the person authorised by a spaceport licence to operate it;
 - (b) in relation to spaceflight activities or activities associated with such activities, or sites, facilities or other things used for or in connection such activities, means the person authorised by an operator licence to carry out the activities;
 - (c) in relation to
 - (i) range control services provided by a range controller,
 - (ii) activities associated with the provision of such services, or
 - (iii) sites, facilities or other things used for or in connection with the provision of such services,

means the range controller.

(3) If the regulator is not the Secretary of State, the regulator may not give a notice under this section without the approval of the Secretary of State.

22 Spaceport byelaws

- (1) A person authorised by a spaceport licence to operate a prescribed spaceport (the "licensee") may make byelaws regulating the use and operation of the spaceport, and the conduct of persons within it, for the purposes of ensuring security in relation to
 - (a) the spaceport;
 - (b) spaceflight activities, and associated activities, carried out at the spaceport;
 - (c) spacecraft and payloads at the spaceport.
- (2) Byelaws under this section ("spaceport byelaws") may make provision
 - (a) for regulating vehicular traffic anywhere within the spaceport, except on roads within the spaceport to which the road traffic enactments apply, and in particular (with that exception) for imposing speed limits on vehicles within the spaceport and for restricting or regulating the parking of vehicles or their use for any purpose or in any manner specified in the byelaws;
 - (b) for prohibiting or restricting access to any part of the spaceport;
 - (c) for preserving order within the spaceport and preventing damage to property within it;
 - (d) for requiring any person, if so requested by a constable or a spaceport official, to leave the spaceport or any particular part of it, or to state his or her name and address and purpose for being within the spaceport.

This subsection does not limit subsection (1).

- (3) A spaceport official may not exercise a power under spaceport byelaws without producing written evidence of his or her authority if required to do so.
- (4) A constable may remove from a spaceport (or from any part of it)
 - (a) a person who fails or refuses to leave the spaceport (or part) after being requested to do so in accordance with a byelaw made by virtue of subsection (2)(d);
 - (b) any vehicle, animal or thing brought to or left within the spaceport (or part) in contravention of a spaceport byelaw;
 - (c) any vehicle, animal or thing likely to cause danger or obstruction.
- (5) Before a licensee makes spaceport byelaws that would apply in relation to any part of an airport in relation to which byelaws under section 63 of the Airports Act 1986 apply, the licensee must consult the person by whom the byelaws under that section were made (unless the licensee is that person).
- (6) Spaceport byelaws do not have effect until they are confirmed by the Secretary of State.
- (7) Schedule 3 to the Airports Act 1986 (further provision about byelaws) applies in relation to
 - (a) spaceports,
 - (b) holders of spaceport licences, and
 - (c) spaceport byelaws,

as it applies in relation to airports, airport operators and byelaws under section 63 of that Act.

- (8) A person who contravenes a spaceport byelaw commits an offence and is liable on summary conviction to a fine not exceeding the amount specified by the byelaws in relation to the contravention.
- (9) The maximum fines that spaceport byelaws may specify by virtue of subsection (8) are fines of an amount at level 4 on the standard scale or of a lower amount.
- (10) The Secretary of State may by regulations revoke or vary a spaceport byelaw to the extent that it appears to the Secretary of State to be inconsistent with
 - (a) the security of the spaceport, of spaceflight activities carried out at the spaceport or of spacecraft or payloads at the spaceport,
 - (b) the safety of persons or vehicles using the spaceport, of spacecraft or of the general public, or
 - (c) any international obligation of the United Kingdom.

Before exercising the power under this subsection the Secretary of State must consult the person by whom the byelaw was made.

- (11) In this section
 - "the road traffic enactments" means the enactments (whether passed before or after this Act) relating to road traffic, including the lighting and parking of vehicles, and any order or other instrument having effect by virtue of any such enactment;

"spaceport official" means a person authorised by the licensee.

23 Provision of advice and assistance on security matters

- (1) A regulator to which this section applies may, in response to a request from -
 - (a) the holder of a licence under this Act, or
 - (b) an associated company of the holder of such a licence,

provide advice or assistance, to the person making the request, about any matter that is relevant to the exercise of the regulator's functions for the purpose mentioned in subsection (2).

- (2) This section applies to a person appointed by regulations under section 14 to exercise functions for the purpose of ensuring security in relation to any activity, service, site, facility or other thing mentioned in section 20(1).
- (3) The Secretary of State may
 - (a) provide advice or assistance to any persons in connection with measures they are required to take by directions given in the interests of national security under section 26;
 - (b) provide any advice or assistance to specified persons that the Secretary of State considers appropriate for the purpose mentioned in subsection (2).
- (4) In providing advice or assistance under subsection (3)(b), the Secretary of State must have regard to any advice given by a regulator under subsection (1).
- (5) The power under subsection (1) is in addition to any other duty or power of the regulator to provide advice or assistance.

- (6) The powers under subsection (3) are in addition to any other duty or power of the Secretary of State to provide advice or assistance.
- (7) A person providing advice or assistance under this section (P) is entitled to recover from the person to whom it is provided a sum equal to any expense reasonably incurred by P in providing the advice or assistance.

Enforcement etc

24 Monitoring and enforcement by regulator

- (1) The regulator is responsible for monitoring
 - (a) spaceflight activities,
 - (b) the operation of spaceports,
 - (c) the provision of range control services by range controllers, and
 - (d) associated activities,

for the purposes set out in subsection (2).

- (2) Those purposes are
 - (a) securing compliance with the provisions contained in and made under this Act, the conditions of licences under this Act and the international obligations of the United Kingdom;
 - (b) protecting public safety and the national security of the United Kingdom.
- (3) Regulations may for any of those purposes
 - (a) require information to be provided to the regulator by persons
 - (i) carrying out spaceflight activities,
 - (ii) operating spaceports,
 - (iii) providing range control services under range control licences, or
 - (iv) carrying out associated activities;
 - (b) provide for the inspection of sites, facilities, equipment, spacecraft, carrier aircraft and other vehicles;
 - (c) provide for the inspection of documents;
 - (d) provide for the appointment of inspectors;
 - (e) make provision about the powers and duties of inspectors appointed under the regulations;
 - (f) provide for the sharing of information between the regulator and other public authorities or international organisations responsible for regulating any aspect of spaceflight activities;
 - (g) restrict the disclosure of information obtained or shared under the regulations.
- (4) The regulator may investigate and prosecute offences under this Act or under regulations made under this Act.

25 Power to give directions: breach of licence condition etc

(1) This section applies where it appears to the regulator that a person is carrying out spaceflight activities, operating a spaceport or providing range control services –

- (a) without an authorisation required by this Act,
- (b) in contravention of the conditions of a licence under this Act, or
- (c) in contravention of any provisions contained in or made under this Act.
- (2) The regulator may give any directions to that person that appear to be necessary in the interests of safety or for the purposes of securing compliance with—
 - (a) the conditions of a licence,
 - (b) provisions contained in or made under this Act, or
 - (c) the international obligations of the United Kingdom.

26 Power to give directions in the interests of safety, security etc

- (1) The regulator may give to a licensee whatever directions the regulator considers to be necessary or expedient in the interests of health or safety.
- (2) The Secretary of State may give to the regulator (if the regulator is not the Secretary of State) a direction requiring the regulator (according to the circumstances of the case) to do, or not to do, a particular thing specified in the direction, if the Secretary of State considers it necessary or expedient to give the direction in the interests of
 - (a) health or safety,
 - (b) national security, or
 - (c) relations with a country or territory outside the United Kingdom.
- (3) The Secretary of State may give to a licensee, or to particular kinds of licensee or licensees generally, whatever directions of a general character the Secretary of State considers to be necessary or expedient in the interests of
 - (a) health or safety,
 - (b) national security, or
 - (c) relations with a country or territory outside the United Kingdom.
- (4) The Secretary of State may give to a licensee a direction requiring the licensee (according to the circumstances of the case) to do, or not to do, a particular thing specified in the direction, if the Secretary of State considers it necessary or expedient to give the direction in the interests of
 - (a) health or safety,
 - (b) national security, or
 - (c) relations with a country or territory outside the United Kingdom.
- (5) Before giving a direction under subsection (4) requiring a licensee to revoke or vary a byelaw under section 22, the Secretary of State must consult the person by whom the byelaw was made.
- (6) The Secretary of State may give to a licensee, or an associated company of a licensee, a direction requiring that person (according to the circumstances of the case)
 - (a) to do, or not to do, in connection with any spaceflight activities or any provision of range control services authorised by the licence, a particular thing specified in the direction, or
 - (b) to secure that a particular thing specified in the direction is done or not done in connection with any such activities or services,

if the Secretary of State considers it necessary or expedient to give the direction in order to discharge or facilitate the discharge of any international obligation of the United Kingdom.

- (7) A body corporate is treated for the purposes of subsection (6) as an associated company of a licensee if
 - (a) that body or the licensee is a body corporate of which the other is a subsidiary, or
 - (b) both of them are subsidiaries of the same body corporate.
- (8) A person must not disclose, and is not required by virtue of any enactment or otherwise to disclose, any direction given or other thing done by virtue of this section if the Secretary of State has notified the person that the Secretary of State is of the opinion that disclosure of that direction or thing
 - (a) is against the interests of national security or of relations with a country or territory outside the United Kingdom, or
 - (b) is against the commercial interests of some other person.
- (9) A person who in contravention of subsection (8) discloses any direction given, or other thing done, by virtue of this section commits an offence.
- (10) In this section "licensee" means the holder of a licence under this Act.

27 Further provision about directions

- (1) A power to give a direction under section 25 or 26 (other than the power under section 26(2)) includes power to give any directions that appear necessary to bring about
 - (a) the cessation of any activities, or
 - (b) the disposal of any object or material that is being, has been or is to be used in connection with any spaceflight activities.
- (2) Where the regulator is not the Secretary of State
 - (a) the regulator must consult the Secretary of State before giving a direction under section 25 or 26;
 - (b) the Secretary of State must consult the regulator before giving such a direction.
- (3) Before giving a direction under section 25 or 26 to a particular person the regulator or the Secretary of State must consult that person.
- (4) Before giving a direction under section 26(3) to particular kinds of licensees the Secretary of State must consult licensees of those kinds.
- (5) Before giving a direction under section 26(3) to licensees generally the Secretary of State must consult all licensees.
- (6) In an urgent case, subsections (2) to (5) require consultation only to the extent (if any) that it is practical.
- (7) It is an offence for a person to fail to comply with a direction under section 25 or 26.
- (8) Compliance with a direction under section 25 or 26 may, without prejudice to subsection (7) or other means of enforcement, be enforced on the application of the person giving the direction
 - (a) by injunction, or

(b) in Scotland, by interdict or by order under section 45 of the Court of Session Act 1988.

28 Warrants authorising entry or direct action

- (1) A justice of the peace may issue an enforcement warrant if satisfied by information on oath that
 - (a) there are reasonable grounds for believing that a person is carrying out spaceflight activities, operating a spaceport or providing range control services
 - (i) without an authorisation required by this Act, or
 - (ii) in contravention of the conditions of a licence under this Act, or
 - (iii) in contravention of any provisions contained in or made under this Act,
 - (b) a direction has been given under section 25, and
 - (c) there are reasonable grounds for believing that the direction has not been complied with, or that a refusal to comply with such a direction is apprehended.
- (2) A justice of the peace may also issue an enforcement warrant if satisfied by information on oath that
 - (a) a direction has been given under section 26, and
 - (b) there are reasonable grounds for believing that the direction has not been complied with, or that a refusal to comply with such a direction is apprehended.
- (3) A justice of the peace may also issue an enforcement warrant if satisfied by information on oath that
 - (a) the regulator needs access to premises in order to do anything that the regulator or an inspector is permitted to do under
 - (i) regulations made under section 24, or
 - (ii) a condition of a licence under this Act, and
 - (b) the holder of the licence is refusing to allow the regulator that access.
- (4) An enforcement warrant is a warrant authorising a named person to do anything necessary
 - (a) to secure the health or safety of persons;
 - (b) to secure compliance with the international obligations of the United Kingdom;
 - (c) to secure compliance with the conditions of the licence;
 - (d) to secure compliance with any provisions contained in or made under this Act.
- (5) The warrant must specify the action authorised.
- (6) An enforcement warrant may authorise entry on to specified premises at any reasonable hour and on production, if so required, of the warrant.
- (7) The powers conferred by a warrant include
 - (a) power for the named person to take with him or her any person authorised by the Secretary of State or, if the named person has reasonable cause to believe that he or she is likely to be obstructed, a constable;
 - (b) power to use reasonable force, if necessary.

- (8) An enforcement warrant remains in force for a period of one month from the date of its issue.
- (9) It is an offence intentionally to obstruct a person in the exercise of powers conferred by an enforcement warrant.
- (10) In the application of this section to Scotland
 - (a) a reference to a justice of the peace is to be read as a reference to a sheriff or summary sheriff;
 - (b) a reference to information is to be read as a reference to evidence.
- (11) In the application of this section to Northern Ireland
 - (a) a reference to a justice of the peace is to be read as a reference to a lay magistrate;
 - (b) a reference to information is to be read as a reference to a complaint.

29 Power to authorise entry in emergencies

- (1) The Secretary of State may grant an enforcement authorisation if satisfied
 - (a) that the conduct or apprehended conduct of persons involved in or associated with spaceflight activities that are being carried out, or are about to be carried out, gives rise to
 - (i) a serious risk to national security,
 - (ii) a serious risk of contravention of any international obligation of the United Kingdom, or
 - (iii) a serious risk to the health or safety of persons, and
 - (b) that the case is one of urgency.
- (2) An enforcement authorisation is an authorisation by which a named person is authorised to do anything necessary
 - (a) for protecting the national security of the United Kingdom (where subsection (1)(a)(i) applies);
 - (b) for securing compliance with the international obligations of the United Kingdom (where subsection (1)(a)(ii) applies);
 - (c) for protecting the health or safety of persons (where subsection (1)(a)(iii) applies).
- (3) The Secretary of State may grant an enforcement authorisation to a person only if satisfied that the person is suitably qualified to carry out the action to be authorised by it.
- (4) An enforcement authorisation
 - (a) must be in writing;
 - (b) must specify the action authorised.
- (5) An enforcement authorisation may authorise entry on to specified premises at any time and on production, if so required, of the authorisation.
- (6) The powers conferred by an enforcement authorisation include
 - (a) power for the named person to take with him or her a person authorised by the Secretary of State or, if the named person has reasonable cause to believe that he or she is likely to be obstructed, a constable;
 - (b) power to use reasonable force, if necessary.

- (7) An enforcement authorisation remains in force for a period of one month from the date of its grant.
- (8) It is an offence intentionally to obstruct a person in the exercise of the powers conferred by an enforcement authorisation.

Liabilities, indemnities and insurance

30 Liability of licensee for injury or damage etc

- (1) No liability arises in trespass or nuisance in respect of spaceflight activities carried out in compliance, or substantially in compliance, with the requirements and conditions imposed by or under this Act.
- (2) Where injury or damage is caused to a person or property on land or water
 - (a) by any craft or space object being used by a person ("the operator") for spaceflight activities,
 - (b) by anything falling from such a craft or object, or
 - (c) by any person in such a craft,

damages in respect of the injury or damage are recoverable without proof of negligence or intention or other cause of action, as if the injury or damage had been caused by the wilful act, neglect, or default of the operator.

- (3) Subsection (2) does not apply to
 - (a) injury or damage sustained by an individual of a prescribed description taking part in, or otherwise engaged in connection with, the spaceflight activities;
 - (b) injury or damage caused or contributed to by the negligence of the person by whom it is sustained.
- (4) Where -
 - (a) injury or damage is caused as mentioned in subsection (2),
 - (b) damages are recoverable from the operator in respect of the injury or damage only by virtue of that subsection, and
 - (c) a person other than the operator is liable in respect of the injury or damage,

the operator is entitled to be indemnified by that other person against any claim in respect of the injury or damage.

- (5) Regulations may impose a limit on the amount of the liability of the holder of an operator licence (under this section or otherwise) in respect of injury or damage that
 - (a) arises out of spaceflight activities carried out by the licensee, and
 - (b) is sustained in prescribed circumstances or by persons of prescribed descriptions.
- (6) In this section "injury or damage" means personal injury, death or physical damage.

31 Power of Secretary of State to indemnify

(1) Subsections (2) and (3) apply where –

- (a) loss or damage is sustained by a person as a result of spaceflight activities carried out by the holder of an operator licence ("the licensee"),
- (b) that person is not an individual of a prescribed description taking part in, or otherwise engaged in connection with, those activities, and
- (c) the licensee is liable to that or some other person ("the claimant") in respect of the loss or damage.
- (2) If the amount of the licensee's liability exceeds an amount specified in the licence as mentioned in paragraph 34(a) of Schedule 1, the Secretary of State may indemnify the licensee in respect of the excess to the extent that it is uninsured.

The excess is "uninsured" to the extent (if any) that the amount of the licensee's liability to the claimant exceeds the amount for which the licensee is insured in respect of that liability.

- (3) If the amount of the licensee's liability exceeds a limit imposed under section 30(5), the Secretary of State may indemnify the claimant in respect of the excess.
- (4) Regulations may prescribe
 - (a) limits on the amounts that the Secretary of State may pay under subsection (2) or (3);
 - (b) cases or circumstances in which the Secretary of State's power under subsection (2) or (3) does not arise.
- (5) Regulations may make provision enabling the Secretary of State
 - (a) to participate in legal proceedings concerning a liability in relation to which a power under subsection (2) or (3) might arise, or
 - (b) to direct the conduct of the case of a person alleged to be liable in such proceedings.

32 Obligation to indemnify government etc against claims

- (1) A person carrying out spaceflight activities must indemnify
 - (a) Her Majesty's government in the United Kingdom, or
 - (b) a person or body listed in subsection (2),

against any claims brought against the government, or the person or body, in respect of damage or loss arising out of or in connection with those activities.

- (2) The listed persons and bodies are
 - (a) an appointed person;
 - (b) the Health and Safety Executive;
 - (c) the Health and Safety Executive for Northern Ireland;
 - (d) the Office for Nuclear Regulation;
 - (e) a body or person prescribed under section 19(2);
 - (f) a public authority with whom arrangements are made under 59;
 - (g) a person providing advice or assistance in response to a requirement imposed under section 19(1)(a).
- (3) Subsection (1)
 - (a) is subject to any limit specified under section 10(2) on the amount of a licensee's liability, except in prescribed cases or circumstances;
 - (b) is subject to regulations made by virtue of section 3(5).

- (4) The obligation in subsection (1) does not apply
 - (a) to a person carrying out spaceflight activities as an employee or agent of a person who is authorised to carry them out by an operator licence, or
 - (b) in relation to damage or loss resulting from anything done on instructions given by or on behalf of the regulator.

33 Regulator etc not liable in respect of spaceflight-related actions

- (1) A person or body to whom this section applies is not liable (whether in negligence, for breach of statutory duty or on any other basis) to any person—
 - (a) for taking or failing to take any relevant actions, or
 - (b) for the way in the person or body takes any relevant actions.
- (2) This section applies to
 - (a) the Secretary of State;
 - (b) the regulator (if the regulator is not the Secretary of State);
 - (c) the CAA (if not an appointed person);
 - (d) the Health and Safety Executive;
 - (e) the Health and Safety Executive for Northern Ireland;
 - (f) the Office for Nuclear Regulation;
 - (g) a body or person prescribed under section 19(2);
 - (h) a public authority with whom arrangements are made under 59.
- (3) In subsection (1) "relevant actions" means actions in relation to, or in connection with, spaceflight activities or activities associated with spaceflight activities.
- (4) This section does not apply to liability in respect of wilful misconduct.

34 Insurance

(1) Regulations may require holders of licences under this Act and other persons engaged in spaceflight activities to be insured in respect of prescribed risks and liabilities.

The regulations may prescribe -

- (a) matters to be covered by the insurance;
- (b) matters that may, or may not, be excluded from the cover required;
- (c) the amounts of cover required.
- (2) The Secretary of State may make arrangements with any person, on whatever terms the Secretary of State thinks appropriate, for the purpose of enabling persons to comply with
 - (a) any requirements imposed on them by regulations under subsection (1);
 - (b) any requirements about insurance imposed by licence conditions.
- (3) The arrangements may include
 - (a) the provision of insurance or reinsurance;
 - (b) the provision of an indemnity or guarantee;
 - (c) the making of grants.

- (4) Sums received by the Secretary of State under the arrangements are to be paid into the Consolidated Fund.
- (5) Sums required by the Secretary of State for fulfilling obligations under the arrangements are to be paid out of money provided by Parliament.
- (6) The Secretary of State must lay before Parliament a statement about arrangements under subsection (2), as soon as reasonably practicable after they are made, setting out
 - (a) the persons for whose benefit the arrangements are made;
 - (b) the nature of the arrangements;
 - (c) the amount that may be required to discharge the Secretary of State's obligations under the arrangements.
- (7) While the arrangements continue, the Secretary of State must make a further statement about the arrangements, as soon as reasonably practicable after the end of each report period, setting out
 - (a) any changes in the arrangements;
 - (b) the amount that may be required to discharge the Secretary of State's obligations under the arrangements.

The "report period" is the period of two years beginning with the day on which the statement under subsection (6) is laid before Parliament, and each subsequent period of two years.

(8) A reference in this Act to insurance includes a reference to a security that satisfies prescribed conditions.

References in this Act to being insured, and to reinsurance, are to be read accordingly.

Powers in relation to land: acquisition of land etc

35 **Powers to obtain rights over land**

- (1) The Secretary of State may make an order under this section if satisfied that it is expedient to do so
 - (a) to secure the safe and efficient use for the carrying out of spaceflight activities of any land which is vested in a qualifying person or which a qualifying person proposes to acquire,
 - (b) to secure the provision of any services required in relation to any such land, or
 - (c) to secure that spacecraft and carrier aircraft may be navigated safely.
- (2) An order under this section may create any rights over, in or in relation to land in favour of a qualifying person.
- (3) In this section "qualifying person" means
 - (a) the Secretary of State;
 - (b) a range controller;
 - (c) the holder of a spaceport licence.
- (4) The rights created under subsection (2) may include
 - (a) easements;
 - (b) servitudes over land;
 - (c) rights to carry out and maintain works on any land;

- (d) rights to install and maintain structures and apparatus on, under or over any land.
- (5) An order under this section may
 - (a) include provision authorising persons to enter any land for the purpose of carrying out, maintaining, installing or removing any works, structures or apparatus;
 - (b) make consequential, incidental and supplemental provisions.
- (6) A person must not, in exercise of a power conferred by an order under this section, enter any land that is occupied unless a notice has been served on the occupier of the land not less than seven days before the proposed day of entry.
- (7) The notice under subsection (6) must -
 - (a) state the proposed date of entry;
 - (b) specify the purposes for which entry will be made.
- (8) Subsection (6) does not restrict any right of any person to enter land
 - (a) in a case of emergency, or
 - (b) for the purpose of performing any functions that are required to be performed in connection with the maintenance or use of any works, structures or apparatus.
- (9) The ownership of anything is not affected by reason only that it is placed on or under, or affixed, to any land in pursuance of an order under this section.
- (10) For the purposes of this section, a reference to carrying out works on land includes a reference to excavating the land or carrying out levelling operations on the land.

A reference to maintaining works is to be read accordingly.

- (11) Schedule 5 makes further provision in relation to orders under this section.
- (12) The provisions of Schedule 5 are subject to section 43 and Schedule 7 (special provision for statutory undertakers).
- (13) An order under this section is subject to special parliamentary procedure if
 - (a) the order provides for the creation of any right over, in or in relation to land held by a statutory undertaker for the purposes of the carrying on of the undertaker's undertaking, and
 - (b) the Secretary of State certifies, in response to a representation made by the statutory undertaker before the relevant day, that he or she is satisfied that the right could not be enjoyed without serious detriment to the carrying on of the undertaker's undertaking.

"The relevant day" means the day specified in the notice served on the statutory undertaker under paragraph 1(1)(b) of Schedule 5 or (as the case may be) paragraph 2(1)(b) of that Schedule.

36 Orders under section 35: offences

- (1) Whilst an order under section 35 is in force, a person must not, without the consent of the person in whose favour the order is made, interfere with—
 - (a) any works carried out on any land under the order, or
 - (b) anything installed on, under, over or across any land under the order.
- (2) A person who contravenes subsection (1) commits an offence.

- (3) A person who obstructs any person in the exercise of any power of entry conferred by an order under section 35 commits an offence.
- (4) Proceedings for an offence under this section may be instituted -
 - (a) in England and Wales, only by or with the consent of the Secretary of State or the Director of Public Prosecutions;
 - (b) in Northern Ireland, only by or with the consent of the Secretary of State or by the Attorney General for Northern Ireland.
- (5) For the purposes of this section, a reference to the carrying out of works on land includes a reference to excavating the land or the carrying out of levelling operations on the land.

A reference to interfering with works is to be read accordingly.

37 Power to restrict use of land to secure safety

- (1) The Secretary of State may by order impose prohibitions or restrictions on the use of any area of land or water as a place for the arrival and departure of civil aircraft or spacecraft if satisfied that it is expedient to do so
 - (a) to secure that spacecraft or carrier aircraft may be safely launched or landed at a spaceport specified in the order, or
 - (b) to prevent spacecraft or carrier aircraft that may be launched or landed at the spaceport from endangering persons or property.
- (2) An order under subsection (1) may not impose prohibitions or restrictions in relation to tidal waters beyond those of the territorial sea adjacent to the United Kingdom.
- (3) Paragraphs 1 to 6 of Schedule 5 apply to an order under this section that does not impose any prohibitions or restrictions on the use of water (a "land order").
- (4) In the case of an order that is not a land order
 - (a) before making the order, the Secretary of State must publish a notice in whatever way the Secretary of State thinks is best calculated to bring the proposed order to the notice of those persons who will be affected by it;
 - (b) immediately after the order has been made, the Secretary of State must
 - (i) publish a notice in one or more newspapers circulating in the locality to which the order relates, and
 - (ii) serve a copy of that notice on any person who, in the opinion of the Secretary of State, is likely to be affected by the order.
- (5) A notice under subsection (4)(a) must
 - (a) state that the Secretary of State proposes to make the order;
 - (b) state the effect of the proposed order.
- (6) A notice under subsection (4)(b) must
 - (a) state that the order has been made;
 - (b) specify a place where a copy of the order may be inspected at reasonable hours.
- (7) Paragraphs 7 and 8 of Schedule 5 (appeals) apply to any order made under this section.

- (8) A person who has an interest in land to which an order under this section relates is entitled, if the value of the interest is diminished by the coming into operation of the order, to recover compensation for the diminution from the operator of the spaceport specified in the order.
- (9) For the purpose of assessing compensation under subsection (8)
 - (a) the land compensation provisions (so far as applicable) have effect as they have effect for the purpose of assessing compensation for the compulsory acquisition of land, subject to any necessary modifications;
 - (b) paragraph 10 of Schedule 5 has effect in relation to any such compensation as it has effect in relation to any compensation mentioned in that paragraph.
- (10) "The land compensation provisions"
 - (a) in the case of land in England and Wales, means section 5 of the Land Compensation Act 1961;
 - (b) in the case of land in Scotland, means section 12 of the Land Compensation (Scotland) Act 1963;
 - (c) in the case of land in Northern Ireland, means the Land Compensation (Northern Ireland) Order 1982 (despite paragraph 4 of Schedule 1 to that Order, which confines the operation of the Order to matters that were within the legislative competence of the Parliament of Northern Ireland).
- (11) A person who sustains damage that
 - (a) is due to the person being disturbed in the use of land or water as a result of the coming into operation of an order under this section, and
 - (b) does not consist of the diminution in the value of an interest of the land,

is entitled to recover compensation for the damage from the operator of the spaceport specified in the order.

- (12) Where a dispute arises as to whether compensation is payable under this section or the amount of it, or the persons to whom is it payable, the dispute is to be referred to and determined by the appropriate tribunal.
- (13) Subsections (8), (11) and (12) are subject to section 43 and Schedule 7 (special provision for statutory undertakers).
- (14) It is an offence to contravene a provision of an order under this section.
- (15) An offence under subsection (14) committed on tidal waters outside the ordinary jurisdiction of a court of summary jurisdiction may be tried and punished by such a court as if it had been committed in the nearest part of the United Kingdom that is within the jurisdiction of such a court.
- (16) Subsection (15), as it applies in relation to Scotland, does not confer jurisdiction on any court of summary jurisdiction other than the sheriff court.
- (17) Proceedings for an offence under subsection (14) may be instituted
 - (a) in England and Wales, only by or with the consent of the Secretary of State or the Director of Public Prosecutions;
 - (b) in Northern Ireland, only by or with the consent of the Secretary of State or by the Attorney General for Northern Ireland.

38 Power to exercise control over land in interests of spaceflight activities

- (1) The Secretary of State may by order under this section declare that a specified area of land is subject to control by directions under this section.
- (2) In this section "specified" means specified in an order under this section.
- (3) The Secretary of State may make an order under this section only if satisfied that it is expedient to do so for the purpose of
 - (a) securing the safe and efficient use for the carrying out of spaceflight activities of any land
 - (i) that is vested in the holder of a range control licence or a spaceport licence ("the licensee"), or
 - (ii) that a licensee proposes to acquire,
 - (b) securing the provision of any services required in relation to any such land, or
 - (c) securing that spacecraft and carrier aircraft may be navigated safely.
- (4) In relation to the making of an order under this section, the licensee specified for the purposes of this subsection is the person in respect of whom the order is made or (as the case may be) to be made.
- (5) Where an order under this section is in force, the Secretary of State may, subject to the provisions of the order, give directions
 - (a) for requiring the demolition (whether total or partial) of any building or structure within the specified area of land;
 - (b) for extinguishing any private right of way over land within the specified area;
 - (c) for restricting the installation of cables, mains, sewers, pipes, wires or other apparatus upon, across, under or over land within the specified area;
 - (d) for extinguishing, at the end of a period determined by or under the directions, any subsisting right of installing or maintaining any such apparatus upon, across, under or over land within the specified area;
 - (e) for requiring that, before the end of a period determined by or under the directions, any such apparatus is removed from land within the specified area.
- (6) An order under this section may
 - (a) include provision permitting a person authorised by the Secretary of State to remove, pull down or alter any building, structure or apparatus that contravenes the requirements of a direction to ensure that it complies with the requirements of the direction;
 - (b) make consequential, incidental and supplementary provisions.
- (7) Schedule 6 makes further provision in relation to
 - (a) orders made under this section;
 - (b) directions given under such orders.
- (8) The provisions of Schedule 6 are subject to the section 43 and Schedule 7 (special provision for statutory undertakers).
- (9) It is an offence to fail to comply with a direction given under an order made under this section.

39 Orders under section 38: consequential amendments of local Acts

- (1) The Secretary of State may by regulations repeal or amend any enactment in a local Act if satisfied that the enactment is
 - (a) unnecessary having regard to the provisions of this Act relating to an order made, or to be made, under section 38 in favour of the holder of a spaceport licence, or
 - (b) inconsistent with those provisions.
- (2) Before making regulations under this section, the Secretary of State must consult each local authority that the Secretary of State thinks is likely to be affected by the proposed regulations.

40 Power of entry for purposes of survey

- (1) Where the Secretary of State has made, or is considering the making of, an order under section 35 or 38 the Secretary of State may authorise a person to enter any of the relevant land
 - (a) to make any survey that the Secretary of State requires to be made for the purpose of determining whether the order should be made, or
 - (b) to make any survey that the appropriate authority requires to be made for the purpose of any steps to be taken in consequence of the order.
- (2) In subsection (1)(b) "appropriate authority"
 - (a) in the case of an order made, or to be made, under section 35, means the person in whose favour the order was, or is to be, made;
 - (b) in the case of an order made, or to be made, under section 38, means the person in respect of whom the order was, or is to be, made (see subsection (4) of that section).
- (3) An authorisation under subsection (1) must be in writing.
- (4) A person authorised under subsection (1)
 - (a) may enter the relevant land at any reasonable time for the purpose of making a survey;
 - (b) must, if asked, produce evidence of the person's authority to enter the land.
- (5) A person authorised under subsection (1) may demand admission as of right to any land that is occupied only if eight days notice of the intended entry has been served on the occupier.
- (6) A person who obstructs a person authorised under subsection (1) in the exercise of a power under this section commits an offence.
- (7) Proceedings for an offence under this section may be instituted
 - (a) in England and Wales, only by or with the consent of the Secretary of State or the Director of Public Prosecutions;
 - (b) in Northern Ireland, only by or with the consent of the Secretary of State or by the Attorney General for Northern Ireland.

41 Entry to land for survey: compensation

- (1) Where land is damaged
 - (a) in the exercise of a power of entry conferred under section 40, or

(b) in the making of a survey for the purposes of which such a power is conferred,

the appropriate authority must pay just compensation to the persons interested in the land.

- (2) "Appropriate authority" has the meaning given in section 40(2).
- (3) Where any dispute arises as to whether compensation is payable under this section or the amount of it, or the persons to whom it is payable, the dispute is to be referred to and determined by the appropriate tribunal.

42 Registration of orders, etc under sections 35 and 37

- (1) This section applies to
 - (a) orders under section 35;
 - (b) orders under section 37, other than orders for the imposition of prohibitions or restrictions on the use of water;
 - (c) orders under section 38;
 - (d) directions given under an order made under section 38.
- (2) Orders and directions to which this section applies are, when operative, local land charges in England and Wales.
- (3) In Scotland, where an order or a direction to which this section applies becomes operative
 - (a) it must be registered in the Land Register of Scotland or (as the case may be) recorded in the Register of Sasines;
 - (b) on being registered or recorded it is enforceable against any person having or subsequently acquiring any right in the land to which the order or direction relates.
- (4) Where an order or direction to which this section applies adversely affects land in Northern Ireland, then
 - (a) if the land is registered land to which the Land Registration Act (Northern Ireland) 1970 ("the 1970 Act") applies, the order or direction, on the lodgment of a copy of it by the relevant authority with the Registrar of Titles, is to be registered as a burden affecting the land and created after the first registration;
 - (b) if the land is not registered land to which the 1970 Act applies, the order or direction, on the lodgment of a copy of it by the relevant authority with the Registrar of Deeds for Northern Ireland, is to be registered in the Registry of Deeds, Northern Ireland, as an instrument affecting the lands to which the order or direction relates.
- (5) Where subsection (4)(a) applies, the order or direction may be registered
 - (a) despite any provision of the 1970 Act or any rules made under that Act, and
 - (b) without the concurrence of the registered owner of the land or the production of the land certificate.

But paragraph (b) above does not affect any power of the registering authority to require production of the land certificate.

- (6) In subsection (4) "the relevant authority"
 - (a) in the case of an order under section 35, means the person in whose favour the order was made;

- (b) in the case of an order under section 37, means the operator of the spaceport specified in the order;
- (c) in the case of an order under section 38, or a direction given under such an order, means the person in respect of whom the order was made (see subsection (4) of that section).

Powers in relation to land: supplementary

43 Special provisions relating to statutory undertakers

Schedule 7, which makes provision -

- (a) about the assessment of compensation payable to a statutory undertaker in consequence of an order under section 35 or 37 or a direction under section 38, and
- (b) for the adjustment of the functions of statutory undertakers that may be necessary in consequence of such an order or direction,

has effect.

44 Displacements from land

- (1) Where -
 - (a) the Secretary of State gives a direction in relation to any land pursuant to an order made under section 38, and
 - (b) the execution of the direction will involve the displacement of any person from the land,

the appropriate person is under a duty, in so far as there is no other reasonable residential accommodation available to those who require it in consequence of the displacement, to secure the provision of such accommodation.

"Appropriate person" has the meaning given in paragraph 2(2) of Schedule 6.

- (2) "Reasonable residential accommodation", in relation to persons who require residential accommodation, means residential accommodation that is
 - (a) available on reasonable terms to those persons, and
 - (b) suitable to the reasonable requirements of those persons.
- (3) An appropriate person required under this section to secure the provision of accommodation must secure its provision in advance of the displacement of any person.
- (4) Subsection (3) does not apply if the Secretary of State is satisfied that for reasons of exceptional public importance it is essential that the displacement is effected before the required accommodation can be found.

45 Compensation in respect of planning decisions relating to spaceport safety etc: England and Wales and Scotland

- (1) A local planning authority is entitled to recover from the relevant person a sum equal to any compensation that authority is liable to pay, if
 - (a) the planning authority becomes liable to pay compensation under any of the provisions set out in subsection (3) (which relate to compensation for certain planning restrictions, for purchase notices that do not take effect and in respect of undertakers' operational land), and

- (b) the liability is attributable to a planning decision that would not have been taken, or an order that would not have been made, but for the need to secure the safe and efficient operation of
 - (i) a spaceport, or
 - (ii) range control apparatus.
- (2) The relevant person is
 - (a) where subsection (1)(b)(i) applies, the person authorised to operate the spaceport by a spaceport licence;
 - (b) where subsection (1)(b)(ii) applies, the range control service provider who operates the relevant range control apparatus.
- (3) The provisions are
 - (a) sections 107, 108, 144(2) and 279(1) of the Town and Country Planning Act 1990 ("the 1990 Act");
 - (b) sections 76, 77, 95(2) and 232(1) of the Town and Country Planning (Scotland) Act 1997 ("the 1997 Act").
- (4) Where a sum is payable or paid by the relevant person to a local planning authority under subsection (1), the authority must refund to the relevant person any amount received by the authority in respect of compensation under sections 111 and 112 of the 1990 Act or section 82 of the 1997 Act (which relate to compensation on subsequent development).
- (5) A local authority may by notice require the relevant person to purchase an interest from it for the relevant sum, if
 - (a) a purchase notice is served under section 137 of the 1990 Act or section 88 of the 1997 Act in respect of a planning decision that would not have been made but for the need to secure the safe and efficient operation of the relevant spaceport or (as the case may be) the range control apparatus, and
 - (b) the local authority is deemed under section 139(3) or 143(1) of the 1990 Act or section 90(3) or 94(1) of the 1997 Act to have served a notice to treat in respect of the interest specified in the purchase notice.

"The relevant sum" is the amount of compensation payable by the local authority for the interest specified in the purchase notice.

- (6) A notice under subsection (5)
 - (a) must be in writing;
 - (b) must be given to the relevant person before the end of the period of one month beginning with the day on which the amount of compensation payable by the local authority for the interest specified in the purchase notice is agreed or determined.
- (7) Where a notice is given to a relevant person under subsection (5), the relevant person is deemed to have contracted with the relevant local authority to purchase the interest for the relevant sum.
- (8) Any dispute as to
 - (a) whether a planning decision would not have been taken but for the need to secure the safe and efficient operation of a spaceport or range control apparatus, or
 - (b) whether an order would not have been made but for that need,
 - is to be referred to, and determined by, the Secretary of State.

(9) In this section –

- "local planning authority", in relation to England and Wales, includes any authority to which functions of a local planning authority are delegated;
- "planning decision" means a decision made on an application under Part 3 of the 1990 Act or Part 3 of the 1997 Act;
- "range control apparatus" means apparatus operated by a range control service provider for the purposes of providing range control services.

46 Compensation in respect of planning decisions relating to spaceport safety etc: Northern Ireland

- (1) A district council in Northern Ireland is entitled to recover from the relevant person a sum equal to any compensation that council is liable to pay, if
 - (a) the council becomes liable to pay compensation to any person because of a planning decision taken under the Planning Act (Northern Ireland) 2011 by a council, the Department for Infrastructure, or the Planning Appeals Commission, and
 - (b) the liability is attributable to a planning decision that would not have been taken but for the need to secure the safe and efficient operation of –
 - (i) a spaceport, or
 - (ii) range control apparatus.
- (2) The relevant person is
 - (a) where subsection (1)(b)(i) applies, the person authorised to operate the spaceport by a spaceport licence;
 - (b) where subsection (1)(b)(ii) applies, the range control service provider who operates the relevant range control apparatus.
- (3) In this section
 - "planning decision" includes a revocation or modification of a planning permission under Part 3 of the Planning Act (Northern Ireland) 2011;
 - "range control apparatus" means apparatus operated by a range control service provider for the purposes of providing range control services.

47 Powers in relation to land: notices

- (1) Section 56 of the Civil Aviation Act 1982 applies to a notice required to be given or served under the specified provisions of this Act as it applies to a notice required to be served under a provision to which that section applies.
- (2) The specified provisions are
 - (a) section 35;
 - (b) section 37;
 - (c) section 40 as it relates to the service of a notice by a person other than the Secretary of State;
 - (d) section 45;
 - (e) Schedule 5;
 - (f) Schedule 6.

Offences and civil sanctions

48 Application of criminal law to spacecraft

- (1) Any act or omission which
 - (a) occurs outside the United Kingdom on board a UK-launched spacecraft, and
 - (b) would, if occurring in, or in a part of, the United Kingdom, constitute an offence under the law in force in, or in that part of, the United Kingdom,

constitutes that offence.

- (2) Subsection (1) does not apply to any act or omission that is expressly or impliedly authorised under the law of the United Kingdom when taking place outside the United Kingdom.
- (3) For the purpose of conferring jurisdiction, any offence under the law in force in, or in a part of, the United Kingdom committed outside the United Kingdom on board a UK-launched spacecraft is treated as having been committed in any place in, or in that part of, the United Kingdom where the offender may be for the time being.
- (4) Proceedings for a offence may be instituted in reliance on subsection (1)
 - (a) in England and Wales, only by or with the consent of the Director of Public Prosecutions;
 - (b) in Northern Ireland, only by or with the consent of the Attorney General for Northern Ireland.
- (5) Subsection (4) does not apply to an offence under this Act or under regulations made under this Act.
- (6) In this section "UK-launched spacecraft" means a spacecraft launched in the United Kingdom.

49 Offences on board spacecraft: supplementary

- (1) Regulations may
 - (a) provide for any of the listed provisions to apply (to the extent that they otherwise would not) to or in connection with spacecraft;
 - (b) provide for any of the listed provisions to apply with prescribed modifications;
 - (c) make provision corresponding to that made by any of the listed provisions.
- (2) The listed provisions are
 - (a) section 94 of the Civil Aviation Act 1982 (powers of commander of aircraft);
 - (b) section 95 of that Act (provisions as to evidence in connection with aircraft) and subsections (4) and (5) of section 92 of that Act (application of criminal law to aircraft).
- (3) The power under this section to apply with modifications an enactment creating an offence does not include power
 - (a) to modify the mode of trial for the offence, or
 - (b) to specify greater penalties for it.

- (4) The power under this section to make provision corresponding to any such enactment does not include power
 - (a) to make different provision with regard to the mode of trial for a new offence, or
 - (b) to specify greater penalties for a new offence,

as compared with the provision or penalties that apply to the existing offence to which the new offence corresponds.

50 Penalties for offences under this Act

- (1) A person who commits an offence under a provision of this Act, other than section 28(9), 36(2) or (3), 37(14), 40(6) or 61(5), is liable
 - (a) on summary conviction
 - (i) in England and Wales, to a fine;
 - (ii) in Scotland or Northern Ireland, to a fine not exceeding the statutory maximum;
 - (b) on conviction on indictment
 - (i) to a fine,
 - (ii) to imprisonment for a term not exceeding two years, or
 - (iii) to both.
- (2) A person who commits an offence under section 28(9) is liable on summary conviction—
 - (a) to a fine (in England and Wales) or a fine not exceeding level 5 on the standard scale (in Scotland or Northern Ireland),
 - (b) to imprisonment for a term not exceeding 12 months (in England and Wales or Scotland) or six months (in Northern Ireland), or
 - (c) to both.
- (3) A person who commits an offence under section 36(2) is liable on summary conviction—
 - (a) to a fine (in England and Wales) or a fine not exceeding level 5 on the standard scale (in Scotland or Northern Ireland),
 - (b) to imprisonment for a term not exceeding three months, or
 - (c) to both.
- (4) A person who commits an offence under section 36(3) is liable on summary conviction—
 - (a) in England and Wales, to a fine;
 - (b) in Scotland or Northern Ireland, to a fine not exceeding level 5 on the standard scale.
- (5) A person who commits an offence under section 37(14) or 61(5) is liable
 - (a) on summary conviction
 - (i) to a fine (in England and Wales) or a fine not exceeding the statutory maximum (Scotland or Northern Ireland),
 - (ii) to imprisonment for a term not exceeding three months (in England and Wales or Northern Ireland) or 12 months (in Scotland), or
 - (iii) to both;
 - (b) on conviction on indictment
 - (i) to a fine,

- (ii) to imprisonment for a term not exceeding two years, or(iii) to both.
- (6) A person who commits an offence under section under 40(6) is liable on summary conviction to a fine not exceeding level 2 on the standard scale.
- (7) In relation to an offence committed before the commencement of section 154(1) of the Criminal Justice Act 2003 (general limit on magistrates' courts powers to imprison), the reference in subsection (2)(b), as it has effect in England and Wales, to 12 months is to be read as a reference to six months.

51 Offences under regulations

- (1) Regulations under this Act may create offences.
- (2) Regulations may provide for an offence under the regulations to be triable
 - (a) only summarily, or
 - (b) either summarily or on indictment.
- (3) Regulations may provide for an offence under the regulations that is triable either way to be punishable
 - (a) on conviction on indictment
 - (i) with imprisonment for a term not exceeding the period prescribed, which may not exceed two years,
 - (ii) with a fine, or
 - (iii) with both;
 - (b) on summary conviction
 - (i) in England and Wales, with a fine, or
 - (ii) in Scotland or Northern Ireland, with a fine not exceeding the statutory maximum.
- (4) Subsection (3)(a)(i) has effect with the substitution of "five years" for "two years" in the case of a provision about endangering a spacecraft or persons in a spacecraft.
- (5) Regulations may provide for a summary offence under the regulations to be punishable in England and Wales
 - (a) with a fine, or
 - (b) with a fine not exceeding a prescribed amount, which must not exceed level 4 on the standard scale.
- (6) Regulations may provide for a summary offence under the regulations to be punishable in Scotland or Northern Ireland with a fine not exceeding a prescribed amount, which must not exceed level 5 on the standard scale.
- (7) This section is subject to -
 - (a) section 49(3) and (4);
 - (b) paragraph 6(2) and (3) of Schedule 3;
 - (c) paragraph 4 of Schedule 4.

52 Offences under regulations: extended time limit in case of accident investigation etc

- (1) Summary proceedings for an offence under regulations made under this Act may be instituted at any time within 12 months from the commission of the offence if
 - (a) it was committed in connection with spaceflight activities (including activities to which the Outer Space Act 1986 applies) arising out of which, or in the course of which, an accident occurred, and
 - (b) not more than six months after the commission of the offence
 - (i) public notice has been given that an investigation into the accident is being carried out in accordance with regulations under section 18, or
 - (ii) the Secretary of State (acting alone or with any government department) has directed that a public inquiry into the accident be held in accordance with those regulations.
- (2) The fact that a direction has been given as mentioned in subsection (1)(b)(ii) on a particular date may be proved by the production of a certificate to that effect purporting to be signed by an official of the Secretary of State.
- (3) This section does not affect section 127(2) of the Magistrates' Courts Act 1980 or Article 19(2) of the Magistrates' Courts (Northern Ireland) Order 1981 (no time limit for offences triable either way).
- (4) In this section "accident" has the same meaning as in section 18.

53 Defences

- (1) It is a defence for a person charged with an offence under a provision of this Act to show that the person exercised all due diligence and took all reasonable precautions to avoid committing the offence.
- (2) A person is taken to have shown that the person exercised all due diligence and took all reasonable precautions to avoid committing the offence if
 - (a) sufficient evidence of the fact is adduced to raise an issue with respect to it, and
 - (b) the contrary is not proved beyond reasonable doubt.
- (3) Subsection (1) does not apply to an offence under
 - (a) section 3(8),
 - (b) section 6(7),
 - (c) section 16(6),
 - (d) section 28(9),
 - (e) section 29(8),
 - (f) section 37(14),
 - (g) section 40(6), or
 - (h) section 61(5).
- (4) Regulations under this Act that create offences may provide for defences in relation to those offences.

54 Offences by bodies corporate and partnerships

(1) Where an offence committed by a body corporate is proved –

- (a) to have been committed with the consent or connivance of an officer of the body corporate, or
- (b) to be attributable to any neglect on the part of an officer of the body corporate,

the officer (as well as the body corporate) is guilty of the offence and is liable to be proceeded against and punished accordingly.

- (2) In subsection (1) "officer", in relation to a body corporate, means
 - (a) a director, manager, secretary or other similar officer, or
 - (b) any person purporting to act in any such capacity.

In paragraph (a) "director", in relation to a body corporate whose affairs are managed by its members, means a member of the body corporate.

- (3) Proceedings for an offence alleged to have been committed by a partnership may be brought in the name of the partnership.
- (4) Rules of court relating to the service of documents have effect in relation to proceedings for an offence as if the partnership were a body corporate.
- (5) For the purposes of such proceedings the following provisions apply as they apply in relation to a body corporate
 - (a) section 33 of the Criminal Justice Act 1925 and Schedule 3 to the Magistrates' Courts Act 1980;
 - (b) section 18 of the Criminal Justice Act (Northern Ireland) 1945 (c. 15 (N.I.)) and Schedule 4 to the Magistrates' Courts (Northern Ireland) Order 1981 (S.I. 1981/1675 (N.I. 26)).
- (6) A fine imposed on a partnership on its conviction for an offence is to be paid out of the partnership assets.
- (7) Where an offence committed by a partnership is proved
 - (a) to have been committed with the consent or connivance of partner, or
 - (b) to be attributable to any neglect on the part of a partner,

the partner (as well as the partnership) is guilty of the offence and is liable to be proceeded against and punished accordingly.

(8) In this section –

"offence" means an offence created by or under this Act; "partner" includes a person purporting to act as a partner.

55 Civil sanctions

- (1) In this section
 - "the 2008 Act" means the Regulatory Enforcement and Sanctions Act 2008;

"offence under this Act" includes an offence under regulations made under this Act.

- (2) Regulations may make any provision, in relation to an offence under this Act, that could be made under Part 3 of the 2008 Act (civil sanctions) if
 - (a) the regulator (within the meaning of this Act), were a regulator for the purposes of Part 3 of the 2008 Act, and
 - (b) the offence were a relevant offence in relation to that regulator for those purposes.

- (3) For the purposes of subsection (2), references in section 46 of the 2008 Act (stop notices) to any of the matters referred to in subsection (6) of that section are to be read as references to any of the following matters
 - (a) public safety;
 - (b) persons carried in spacecraft or carrier aircraft;
 - (c) persons at work at spaceports, mission management facilities or sites used in connection with the provision of range control services;
 - (d) the interests of persons in relation to the use of land, sea and airspace;
 - (e) the interests of persons with interests in property carried by spacecraft.
- (4) Sections 63 to 69 of the 2008 Act (guidance; exercise of powers; payment into Consolidated Fund) apply to provision made under this section as they apply to provision made under Part 3 of that Act.
- (5) For the purposes of subsection (4)
 - (a) references to a regulator in sections 63 to 69 of the 2008 Act are to be read as references to the regulator within the meaning of this Act, but
 - (b) section 68 of the 2008 Act does not apply where the regulator is the Secretary of State.

Appeals

56 Appeals

Schedule 8, which makes provision for –

(a) appeals against decisions under this Act and under the Outer Space Act 1986, and

(b) the establishment of a panel to consider such appeals, has effect.

Miscellaneous

57 Charging schemes

Schedule 9, which makes provision about schemes for making charges in respect of the performance of functions conferred on the Secretary of State or the regulator by or under this Act, has effect.

58 Provision of advice and assistance by or to an appointed person

- (1) An appointed person must provide to the Secretary of State, or any other person, any advice or assistance that the Secretary of State requires the person to provide in connection with any functions conferred on the Secretary of State by or under this Act.
- (2) A requirement imposed under subsection (1) to provide advice or assistance in connection with a function may be expressed so as to operate as a continuing requirement on the appointed person to provide advice or assistance in connection with that function.
- (3) Where under subsection (1) the Secretary of State
 - (a) requires an appointed person to provide advice or assistance to a person other than the Secretary of State, but

(b) does not undertake to pay the appointed person the cost of doing so, the appointed person may refuse to do so until the other person pays to the appointed person any reasonable charges in respect of the advice or assistance that the appointed person determines.

- (4) An appointed person is entitled to recover from the Secretary of State a sum equal to any expense reasonably incurred by the person in providing the Secretary of State with advice or assistance in response to a requirement imposed under subsection (1).
- (5) A reference to the Secretary of State in subsections (1) to (4) includes a reference to an appointed person other than one required to provide the advice or assistance.
- (6) The Secretary of State may provide advice or assistance to an appointed person, at the person's request, in connection with any functions conferred on the person by or under this Act.
- (7) The Secretary of State is entitled to recover from an appointed person a sum equal to any expense reasonably incurred by the Secretary of State in providing the person with advice or assistance under subsection (6).

59 Co-operation between Secretary of State and other bodies

- (1) The Secretary of State, and any of the bodies to which this section applies, may enter into and maintain arrangements with each other for securing cooperation and the exchange of information in connection with the carrying out of any of their functions.
- (2) This section applies to the following bodies
 - (a) the regulator (if not the Secretary of State);
 - (b) the CAA (if not an appointed person);
 - (c) a range controller;
 - (d) the Health and Safety Executive;
 - (e) the Health and Safety Executive for Northern Ireland;
 - (f) the Office for Nuclear Regulation;
 - (g) any public authority with which the Secretary of State considers it would be appropriate to enter into arrangements under this section.
- (3) The parties to any arrangements made under this section must
 - (a) review the arrangements from time to time;
 - (b) revise them when they consider it appropriate to do so.

60 Agreements with other countries: compliance with requirements etc

- (1) Regulations may provide that, in prescribed circumstances and subject to prescribed conditions, compliance with a prescribed requirement or prohibition imposed for the purpose of giving effect to a relevant agreement is to be taken as compliance with a prescribed requirement or prohibition imposed by subordinate legislation.
- (2) In this section
 - "relevant agreement" means an agreement between the United Kingdom and another country relating to spaceflight activities;

"subordinate legislation" has the same meaning as in the Interpretation Act 1978 (see section 21(1) of that Act).

61 Use of records and documentary evidence

- (1) In any legal proceedings, a document purporting to be certified by a prescribed person as being, or as being a true copy of, or of part of, a document issued or a record kept by the regulator for the purposes of this Act, or regulations made under this Act, is evidence, and in Scotland sufficient evidence, of the matters appearing from the document.
- (2) In any legal proceedings, any record to which subsection (3) applies is evidence, and in Scotland sufficient evidence, of the matters appearing from the record.
- (3) This subsection applies to a record if it was made by and is produced from the custody of a prescribed person, or a person acting under the control of a prescribed person, and purports to show
 - (a) the position of a spacecraft at any material time,
 - (b) the terms or content of any message or signal transmitted to any spacecraft (whether alone or in common with other spacecraft) by the prescribed person or the person acting under that person's control, or
 - (c) the terms or content of any message received from a spacecraft by the prescribed person or the person acting under that person's control.
- (4) The reference in subsection (3) to a record made by or under the control of a prescribed person includes a reference to a document or article
 - (a) purporting to be a copy of the record so made, and
 - (b) certified to be a true copy by, or on behalf of, the prescribed person or the person acting under that person's control.

This section has effect in relation to such a copy as if in subsection (3) the words "and is produced from the custody of" were omitted.

(5) A person who certifies a document or article as mentioned in subsection (4)(b) knowing that it is not a true copy commits an offence.

General

62 Minor and consequential amendments

- (1) Schedule 10 (minor and consequential amendments) has effect.
- (2) The Secretary of State may by regulations make provision that is consequential on any provision made by this Act.
- (3) Regulations under this section may amend, repeal or revoke any enactment passed or made before this Act or in the same Session.
- (4) A statutory instrument containing regulations under this section any of which amend primary legislation may not be made unless a draft of the instrument has been laid before each House of Parliament and approved by a resolution of each House.
- (5) A statutory instrument containing regulations under this section none of which amends primary legislation is subject to annulment in pursuance of a resolution of either House of Parliament.

- (6) In this section "primary legislation" means
 - (a) an Act of Parliament;
 - (b) an Act of the Scottish Parliament;
 - (c) an Act or Measure of the National Assembly for Wales;
 - (d) Northern Ireland legislation.

63 Regulations: general

- (1) Regulations may make provision generally for carrying this Act into effect and for achieving the purpose set out in section 1(1).
- (2) Regulations under this Act may make
 - (a) different provision for different purposes or different areas;
 - (b) provision applying to conduct or places outside the United Kingdom;
 - (c) supplemental, incidental, transitional or consequential provision.
- (3) A power to make regulations under this Act is exercisable by the Secretary of State by statutory instrument.
- (4) A statutory instrument containing regulations under this Act, other than
 - (a) an instrument within subsection (5), or
 - (b) an instrument containing regulations under section 62(4) or 65,

is subject to annulment in pursuance of a resolution of either House of Parliament.

- (5) A statutory instrument containing (whether alone or with other provision) regulations under
 - (a) section 31(4),
 - (b) section 32(3)(a),
 - (c) section 55, or
 - (d) section 60,

may not be made unless a draft of the instrument has been laid before each House of Parliament and approved by a resolution of each House.

- (6) Any provision that under this Act may be included in regulations may be included in an Air Navigation Order.
- (7) An Air Navigation Order containing affirmative-resolution provision may not be submitted to Her Majesty in Council unless a draft of the Order has been laid before each House of Parliament and approved by a resolution of each House.

Provision is "affirmative-resolution provision" if –

- (a) it is included in the Air Navigation Order in reliance on subsection (6), and
- (b) subsection (5) or section 62(4) would apply to a statutory instrument containing regulations making that provision.

64 Interpretation

(1) In this Act –

"Air Navigation Order" means an Order in Council under section 60 of the Civil Aviation Act 1982;

"appointed person" means a person appointed by regulations under section 14;

"the appropriate tribunal" –

- (a) in relation to land in England and Wales, means the Upper Tribunal;
- (b) in relation to land in Scotland, means the Lands Tribunal for Scotland;
- (c) in relation to land in Northern Ireland, means the Lands Tribunal for Northern Ireland;

"the CAA" means the Civil Aviation Authority;

- "carry out", in relation to an activity, is to be read in accordance with subsection (3);
- "insurance", "insured" and "reinsurance" are to be read in accordance with section 34(8);
- "launch" is to be read in accordance with section 1(5);
- "local authority" has the meaning given in section 105 of the Civil Aviation Act 1982;
- "mission management facility", in relation to spaceflight activities, means a site (other than a spaceport) from which the activities are controlled or (as the case may be) are to be controlled;
- "operator licence" has the meaning given by section 3(2);
- "outer space" has the same meaning as in the Outer Space Act 1986;
- "prescribed" means prescribed by regulations or an Air Navigation Order;
- "public safety" means the health and safety of members of the public (see subsection (2)) and the safety of their property;
- "range" has the meaning given by section 4(1);
- "range control services" has the meaning given by section 5;
- "range control licence", "range controller" and "range control service provider" have the meaning given by section 6(2);
- "the regulator" has the meaning given by section 14(9);
- "risk assessment" has the meaning given by section 8(2);
- "rocket" means a projectile of mainly cylindrical or similar shape that can be propelled from or above the earth by combustion of its fuel (or fuel and oxidant);
- "safety regulations" means regulations under section 17;
- "sea", in relation to the United Kingdom, includes the territorial sea adjacent to the United Kingdom;
- "security regulations" means regulations under section 20;
- "space activity" has the meaning given by section 1(2);
- "spaceflight activities" has the meaning given by section 1(2);
- "space object" has the same meaning as in the Outer Space Act 1986;
- "spaceport" has the meaning given by section 1(2);
- "spaceport licence" has the meaning given by section 3(2);
- "sub-orbital activity" has the meaning given by section 1(2);
- "statutory undertaker" and "statutory undertaking" have the meaning given in subsection (4), read with subsection (5);
- "take part", in relation to spaceflight activities, is to be read in accordance with section 8(9);
- "training regulations" means regulations under section 16.

- (2) Regulations may prescribe the meaning of "members of the public" for the purposes of any provision of this Act that refers to public safety. The regulations may provide that a person who is voluntarily in close proximity to a source of danger is not a member of the public for any such purposes.
- (3) For the purposes of this Act, a person carries out a spaceflight activity if the person causes it to occur or is responsible for its continuing.
- (4) "Statutory undertaker" means
 - (a) the holder of a licence under Chapter 1 of Part 1 of the Transport Act 2000 (an "air traffic licensee");
 - (b) a universal service provider (within the meaning of Part 3 of the Postal Services Act 2011) in connection with the provision of a universal postal service (within the meaning of that Part of that Act);
 - (c) a person authorised by any Act (whether public general or local), or by any order or scheme under such an Act, to construct, work or carry on
 - (i) a railway, light railway, tramway, road transport, water transport, canal, inland navigation, dock, harbour, pier or lighthouse undertaking, or
 - (ii) an undertaking for the supply of hydraulic power.

"Statutory undertaking" is to be read accordingly.

- (5) For the purposes of this Act
 - (a) an air traffic licensee is taken to be a statutory undertaker only when carrying out activities authorised by the licence under the Transport Act 2000 (and the licensee's undertaking is taken to be a statutory undertaking only to the extent that it is its undertaking as an air traffic licensee);
 - (b) the undertaking of a universal service provider so far as relating to the provision of a universal postal service is taken to be the provider's statutory undertaking.

References to a person's undertaking are to be read accordingly.

(6) The fact that a spaceport licence is in force in respect of any site does not affect the question whether that site, or any area of land or water of which it (or any part of it) forms part, is an aerodrome within the meaning of the Civil Aviation Act 1982.

65 Commencement

- (1) This Act, apart from sections 63 to 67 (which come into force on the day on which this Act is passed), comes into force on whatever day or days the Secretary of State appoints by regulations.
- (2) Regulations under this section
 - (a) may appoint different days for different purposes;
 - (b) may make transitional, transitory or saving provision.

66 Extent

- (1) This Act extends to
 - (a) England and Wales,

- (b) Scotland, and
- (c) (subject to subsection (2)) Northern Ireland.
- (2) The following provisions of this Act (provisions about statutory undertakers) do not extend to Northern Ireland
 - (a) section 35(12) and (13);
 - (b) section 37(13);
 - (c) section 38(8);
 - (d) section 43;
 - (e) paragraph 12 of Schedule 5;
 - (f) paragraph 11 of Schedule 6;
 - (g) Schedule 7.
- (3) Her Majesty may by Order in Council direct that any of the provisions of this Act extend, with any modifications specified in the Order, to
 - (a) any of the Channel Islands;
 - (b) the Isle of Man;
 - (c) any British overseas territory.
- (4) An amendment made by Schedule 10 has the same extent as the provision to which it relates.

67 Short title

This Act may be cited as the Spaceflight Act 2017.

SCHEDULES

SCHEDULE 1

PARTICULAR CONDITIONS THAT MAY BE INCLUDED IN LICENCES

- 1 Conditions as to compliance with
 - (a) safety requirements regarding the design and operation of spacecraft, carrier aircraft and payloads;
 - (b) requirements regarding the assembling, integration and fuelling of spacecraft or carrier aircraft, mating of spacecraft or carrier aircraft to their payloads and fuelling of payloads;
 - (c) requirements for handling strategies relating to the security and integrity of payloads;
 - (d) requirements relating to range, tracking, surveillance, risk management, weather measurement and meteorological forecasting;
 - (e) requirements for the protection of persons whose health or safety could be put at risk by spaceflight activities carried out by the licensee, or at or from a spaceport operated by the licensee;
 - (f) requirements for the protection of sensitive or restricted information, technology or items.
- 2 Conditions as to following advice given by a range control service provider.
- 3 Conditions as to the craft or equipment, or the types of craft or equipment, used for or in connection with spaceflight activities (including training for spaceflight activities).
- 4 Conditions as to trajectories and mission profiles.
- 5 Conditions requiring the licensee to provide the regulator, or a range control service provider, as soon as possible with
 - (a) information as to the date and location of any launch;
 - (b) the basic orbital parameters of any space object to be put into orbit, including nodal period, inclination, apogee and perigee;
 - (c) any other information that the regulator, or a range control service provider, may require concerning the nature, conduct, location and results of the licensee's activities.
- 6 Conditions requiring the licensee to obtain advance approval from the regulator for any intended deviation from notified orbital parameters, and to inform the regulator or a range control service provider immediately of any unintended deviation.
- 7 Conditions imposing restrictions as to areas in relation to which, the times at which and the manner in which spaceflight activities are carried out.
- 8 Conditions requiring the licensee to notify specified persons –

Section 11

- (a) of any spaceflight activities that are due to be carried out which will or may involve a spacecraft, carrier aircraft or other object flying over, or falling into, a specified area of water;
- (b) of any risk of damage to persons or property in the area whilst the activities are carried out.
- 9 Conditions requiring
 - (a) the launch of a spacecraft or carrier aircraft to be aborted or delayed, or
 - (b) unmanned spacecraft or other objects to be destroyed,

in specified circumstances.

- 10 Conditions governing the disposal of any payload in outer space on the termination of operations and requiring the licensee to notify the regulator as soon as practicable of its final disposal.
- 11 Conditions designed to secure compliance with
 - (a) obligations of the United Kingdom under agreements entered into with other countries;
 - (b) any other international obligations of the United Kingdom.
- 12 Conditions imposing restrictions or prohibitions on spacecraft or carrier aircraft landing outside the United Kingdom.
- 13 Conditions requiring the licensee to conduct the licensee's activities in such a way as
 - (a) to prevent the contamination of outer space or adverse changes in the environment of the earth,
 - (b) to avoid interference with the activities of others in the peaceful exploration and use of outer space,
 - (c) to preserve the national security of the United Kingdom, and
 - (d) not to prejudice the foreign policy of Her Majesty's government in the United Kingdom.
- 14 Conditions requiring spaceflight activities to be carried out at
 - (a) a spaceport that the licensee or another person is authorised to operate by a spaceport licence,
 - (b) an aerodrome licensed under an Air Navigation Order,
 - (c) an aerodrome occupied for the purposes of the armed forces of the Crown, or
 - (d) an aerodrome authorised by a certificate under Commission Regulation (EU) No 139/2014 of 12 February 2014 laying down requirements and administrative procedures related to aerodromes pursuant to Regulation (EC) No 216/2008 of the European Parliament and of the Council.
- 15 Conditions (in the case of a spaceport licence) prohibiting spaceflight activities, or spaceflight activities of a particular description, from being carried out without the prior approval of the regulator.
- 16 Conditions requiring a mission management facility to be located in the United Kingdom if the spaceflight activities controlled from the facility involve spacecraft or carrier aircraft launched from a place in the United Kingdom.

- 17 Conditions permitting inspection by the regulator (or a person acting on the regulator's behalf) of
 - (a) a spaceport, mission management facility or other site used or operated by the licensee, and
 - (b) any facilities, equipment, spacecraft, carrier aircraft or other vehicles on it.
- 18 Conditions permitting testing by the regulator (or a person acting on the regulator's behalf) of
 - (a) the equipment at a spaceport or mission management facility, or
 - (b) any other equipment used by the licensee.
- 19 Conditions permitting the regulator (or a person acting on the regulator's behalf) to inspect and take copies of documents relating to the information required to be given to the regulator.
- 20 Conditions permitting the regulator to attend the launch of any spacecraft or carrier aircraft.
- 21 Conditions permitting the regulator to attend specified meetings.
- 22 Conditions designed to avoid actual or perceived conflicts of interest or undue influence with regard to safety-critical decisions and procedures (including conditions relating to the ownership or control of spaceports, mission management facilities, spacecraft, carrier aircraft, payloads and equipment).
- 23 Conditions relating to the security of
 - (a) spaceports or mission management facilities, or particular areas of them;
 - (b) facilities, equipment, spacecraft, carrier aircraft, other vehicles, payloads, cargo, supplies or other things at spaceports or mission management facilities.
- 24 Conditions relating to the use, processing, communication and distribution of data obtained in the course of spaceflight activities.
- 25 Conditions requiring specified persons taking part in spaceflight activities to be informed that the activities carry an inherent risk of danger and have not been certified as safe by the regulator.
- 26 Conditions corresponding to or supplementing
 - (a) the prohibition in section 15 on individuals taking part in spaceflight activities unless they have consented to accept the risks involved;
 - (b) requirements as to training, qualifications and medical fitness prescribed under section 16.
- 27 Conditions requiring licensees
 - (a) to keep risk assessments under review,
 - (b) to revise them as necessary, and
 - (c) to take appropriate steps where risk assessments are revised.
- 28 Conditions imposing restrictions or requirements as to persons involved in spaceflight activities.
- 29 Conditions as to the qualifications of persons involved in spaceflight activities.

50	Draft Spaceflight Bill Schedule 1 – Particular conditions that may be included in licences
30	Conditions as to the responsibilities of persons involved in spaceflight activities.
31	Conditions requiring co-operation with any accident investigations.
32	Conditions imposing restrictions or requirements as to the carriage for reward of persons or cargo in spacecraft or carrier aircraft.
33	Conditions prohibiting or restricting the display or emission, on or from spacecraft or carrier aircraft, of advertising material or other communications in such a way that the material or communications are visible or audible from the ground.
34	 Conditions requiring insurance or indemnities, including – (a) conditions requiring liability to third parties to be insured for a specified amount; (b) conditions as to compliance with requirements imposed by regulations under section 34(1).
35	Conditions requiring waivers or cross-indemnities to be provided by prescribed persons in prescribed circumstances.
36	Conditions requiring payment to the regulator (whether on the grant of a licence, subsequently or both) of charges determined under a scheme made under Schedule 9.
37	Conditions requiring the licensee to provide the Secretary of State with information about the prices charged, or to be charged, by the licensee for services provided in connection with activities authorised by the licence.
38	Conditions providing for the review or termination of the licence on the happening of specified events.
	SCHEDULE 2 Section 16
	TRAINING REGULATIONS: FURTHER PROVISION
1	(1) Training regulations may make provision requiring an individual's competence –
	(a) to take part in, or otherwise to be engaged in connection with, prescribed activities in a prescribed role or capacity, or
	(b) to work at a prescribed place, or to work at a prescribed place in a prescribed role or capacity,
	to be assessed by a person approved by, or on behalf of, the regulator.

- (2) Training regulations may prescribe what a person may or must do in order to fulfil any prescribed criteria with respect to training and qualifications or medical fitness.
- 2 (1) Training regulations may make provision requiring training to be provided only by a person approved by, or on behalf of, the regulator.
 - (2) Training regulations may make provision
 - (a) requiring training to cover prescribed matters;
 - (b) requiring the content of training to be approved by, or on behalf of, the regulator.

- (3) Training regulations may make provision about
 - (a) training facilities;
 - (b) craft or vehicles to be used for the purposes of training, or
 - (c) the use of training devices.
- (4) Training regulations may make provision about inspection of approved training providers and approved assessors.
- 3 Training regulations may make provision about keeping records of training undertaken or provided.
- 4 Training regulations may make provision
 - (a) about how applications for any authorisation, approval or other document required by the regulations are to be made, considered and determined (including provision about the examinations and tests to be undergone);
 - (b) make provision for any such document to be granted subject to conditions or limitation of time;
 - (c) make provision about the suspension, revocation, recognition, renewal or variation of any such document (including provision about the examinations and tests to be undergone);
 - (d) make provision about the form, custody, protection, cancellation, suspension, endorsement and surrender of any such document.

SCHEDULE 3

Section 17

SAFETY REGULATIONS: FURTHER PROVISION

- 1 (1) Safety regulations may make provision for prohibiting craft being used in spaceflight activities unless prescribed conditions are complied with, or at all.
 - (2) Safety regulations may make provision for the detention of spacecraft.
 - (3) Safety regulations may make provision as to
 - (a) the conditions under which space objects and aircraft carrying space objects may be launched and operated;
 - (b) the conditions under which sub-orbital activities may be carried out;
 - (c) the conditions under which spacecraft and carrier aircraft may fly from one part of the United Kingdom to another.
 - (4) Safety regulations may make provision
 - (a) for minimising or preventing interference with the use, or the effectiveness, of apparatus used in connection with the navigation of spacecraft or carrier aircraft;
 - (b) for prohibiting the use of any apparatus in connection with the navigation of spacecraft or carrier aircraft;
 - (c) for regulating the use of apparatus used in connection with the navigation of spacecraft or carrier aircraft.
 - (5) Safety regulations may make provision for prohibiting or regulating the display of signs or lights liable to endanger spacecraft.

- 2 (1) Safety regulations may make provision for prohibiting the carriage of passengers in spacecraft or carrier aircraft
 - (a) unless prescribed conditions are complied with, or
 - (b) at all.
 - (2) Safety regulations may make provision for prohibiting the carrying on of prescribed activities on board spacecraft or carrier aircraft
 - (a) unless prescribed conditions are complied with, or
 - (b) at all.
 - (3) Safety regulations may make provision for safeguarding the health of persons carried in spacecraft or carrier aircraft.
- 3 (1) Safety regulations may impose prohibitions, restrictions or conditions in relation to the carriage of goods, materials and other items by spacecraft, including (in particular) prohibitions, restrictions or conditions in relation to the carriage of
 - (a) radioactive material, or
 - (b) other materials or items that may be hazardous to persons or the environment.
 - (2) Safety regulations may make provision about payloads carried by spacecraft.
- 4 (1) Safety regulations may make provision prohibiting an individual carrying out a prescribed role, or acting in a prescribed capacity, at a spaceport or mission management facility unless the individual fulfils prescribed criteria.
 - (2) Safety regulations may make provision for the licensing of individuals employed at spaceports in the inspection or supervision of spacecraft or carrier aircraft.
- 5 Safety regulations may make provision under which
 - (a) members of the public may be denied access, at particular times, to spaceports or to particular areas within or in the vicinity of spaceports, or
 - (b) members of the public may be allowed such access only if they have signified their consent (in accordance with provision made by the regulations) to accept the risks involved.
- 6 (1) Safety regulations may
 - (a) provide for any of sections 92 to 94 of the Railways and Transport Act 2003 (aviation: alcohol and drugs) to apply (to the extent that they otherwise would not) in relation to spaceflight activities;
 - (b) provide for any of those provisions of that Act to apply with prescribed modifications;
 - (c) make provision corresponding to that made by any of those provisions of that Act.
 - (2) The power in sub-paragraph (1)(b) does not include power
 - (a) to modify the mode of trial for the offence, or
 - (b) to specify greater penalties for it.
 - (3) The power in sub-paragraph (1)(c) does not include power
 - (a) to make different provision with regard to the mode of trial for a new offence, or

(b) to specify greater penalties for a new offence,

as compared with the provision or penalties that apply to the existing offence to which the new offence corresponds.

- 7 Safety regulations may make provision
 - (a) as to the manner and conditions of the issue, validation, renewal, extension, variation or revocation of any certificate or other document or the undergoing of any examination or test required by the regulations;
 - (b) as to the form, custody, production, cancellation, suspension, endorsement and surrender of any such document.

SCHEDULE 4

Section 20

SECURITY REGULATIONS: FURTHER PROVISION

- 1 (1) Security regulations may make provision for the purpose of ensuring security in relation to
 - (a) space sites or prescribed areas of space sites;
 - (b) facilities, equipment, spacecraft, carrier aircraft, other vehicles, payloads, cargo, supplies or other things at space sites.
 - (2) Security regulations may provide for
 - (a) security vetting of persons permitted to enter areas of space sites to which access is restricted;
 - (b) screening (whether by searches or otherwise) of persons seeking to enter such areas;
 - (c) control of vehicular access to space sites or prescribed areas of space sites;
 - (d) screening (whether by inspection or otherwise) of vehicles, payloads, cargo, supplies or other things for the purpose of deciding whether they may be allowed to enter space sites or prescribed areas of space sites.
 - (3) Security regulations may confer power on the regulator to prevent rights of way being exercised within a space site, for limited periods, at the request of the operator of the site.
 - (4) Security regulations may make provision about the training and qualifications of persons responsible for implementing security measures at space sites.
 - (5) Security regulations may
 - (a) make provision requiring or prohibiting the use of systems for the destruction, in particular circumstances (automatically or otherwise), of spacecraft or space objects in flight or orbit;
 - (b) make provision for the physical security of explosives or other dangerous materials used in connection with such systems;
 - (c) make provision for the electronic security of such systems.
- 2 (1) Security regulations may –

- (a) provide for any of the listed provisions to apply (to the extent that they otherwise would not) in relation to space sites, spaceflight activities, spacecraft and carrier aircraft;
- (b) provide for any of the listed provisions to apply with prescribed modifications;
- (c) make provision corresponding to that made by any of the listed provisions.
- (2) The listed provisions are
 - (a) Part 1 of the Aviation Security Act 1982 (offences against the safety of aircraft etc);
 - (b) Part 2 of that Act (protection of aircraft, aerodromes and air navigation installations against acts of violence) except for sections 20A, 21, 21F, 21G, 21J and 22A;
 - (c) Part 2A of that Act (security planning for aerodromes);
 - (d) Part 3 of that Act (policing of aerodromes) except for section 28;
 - (e) section 1 of the Aviation and Maritime Security Act 1990 (endangering safety at aerodromes);
 - (f) section 93 of the Transport Act 2000 (control in times of hostilities etc) and section 95 of that Act (interpretation).
- 3 (1) Security regulations may make provision, in relation to space sites, spacecraft and carrier aircraft, corresponding to the provision that may be made in relation to aerodromes and aircraft by
 - (a) regulations under section 21F of the Aviation Security Act 1982 (air cargo agents);
 - (b) regulations under section 21G of that Act (duty to report certain occurrences);
 - (c) orders under section 94 of the Transport Act 2000 (orders for possession of aerodromes etc).
 - (2) Subsection (3) (consultation) of section 21F of the Aviation Security Act 1982 applies to regulations made by virtue of sub-paragraph (1)(a) as it applies to regulations under that section.
 - (3) Subsection (2) (consultation) of section 21G of that Act applies to regulations made by virtue of sub-paragraph (1)(b) as it applies to regulations under that section.
 - (4) Subsections (7) and (8) (compensation) of section 94 of the Transport Act 2000 apply for the purposes of regulations made by virtue of sub-paragraph (1)(c) as they apply for the purposes of orders under that section.
- 4 (1) A power under this Schedule to apply with modifications an enactment creating an offence does not include power
 - (a) to modify the mode of trial for the offence, or
 - (b) to specify greater penalties for it.
 - (2) A power under this Schedule to make provision corresponding to any such enactment does not include power
 - (a) to make different provision with regard to the mode of trial for a new offence, or
 - (b) to specify greater penalties for a new offence,

as compared with the provision or penalties that apply to the existing offence to which the new offence corresponds.

SCHEDULE 5

Sections 35 and 37

Orders under sections 35 and 37

Procedure where it is proposed to make, or apply for, an order under section 35 or 37

- 1 (1) Before making an order under section 35 or a land order (see section 37(3)), the Secretary of State must
 - (a) publish a notice in one or more newspapers circulating in the locality in which the land is situated;
 - (b) serve a notice on every owner, lessee and occupier of any of the land;
 - (c) serve a notice upon every local authority within whose area any of the land is situated.
 - (2) A notice published or served under sub-paragraph (1) must
 - (a) state that the Secretary of State proposes to make the order;
 - (b) state the effect of the proposed order;
 - (c) specify the day by which, and the manner in which, any objections to the proposed order may be made.
 - (3) The day specified under sub-paragraph (2)(c) must not fall before the end of the period of 28 days beginning with the day on which the notice is published or served.
 - (4) This paragraph does not apply if the Secretary of State proposes to make an order following an application from the holder of a range control licence or a spaceport licence ("the licensee").
- 2 (1) Before making an application for an order under section 35 or for a land order, the licensee must
 - (a) publish a notice in one or more newspapers circulating in the locality in which the land is situated;
 - (b) serve a notice on every owner, lessee and occupier of any of the land;
 - (c) serve a notice upon every local authority within whose area any of the land is situated.
 - (2) A notice published or served under sub-paragraph (1) must
 - (a) state that the licensee proposes to apply for an order;
 - (b) state the effect of the order that is to be applied for;
 - (c) specify the day by which, and the manner in which, any objections to the proposed order may be made.
 - (3) The day specified under sub-paragraph (2)(c) must not fall before the end of the period of 42 days beginning with the day on which the notice is published or served.

Objections to a proposed order

- 3 If no objection is made under paragraph 1 or 2, or all such objections are withdrawn, the Secretary of State may make the relevant order.
- 4 (1) If any objection made in accordance with paragraph 1 or 2 is not withdrawn, the Secretary of State must, before making the relevant order, either
 - (a) cause a public local inquiry to be held, or

- (b) give objectors the opportunity to appear before and be heard by a person appointed by the Secretary of State for that purpose.
- (2) In sub-paragraph (1) "objector" means a person who has made an objection in accordance with paragraph 1 or 2 and not withdrawn it.
- (3) The Secretary of State may make the relevant order if he or she thinks it appropriate to do so after considering
 - (a) the objections, and
 - (b) the report of the person holding the inquiry or the person appointed under sub-paragraph (1)(b) (as the case may be).
- 5 Despite paragraphs 3 and 4, the Secretary of State
 - (a) may require a person to provide that person's objections to a proposed order in writing;
 - (b) may disregard those objections for the purposes of paragraphs 3 and 4 if satisfied that the objections relate exclusively to matters that can be dealt with by the tribunal by whom compensation is to be assessed.

Procedure after making an order

- 6 (1) Immediately after the making of an order under section 35 or a land order, the relevant person must
 - (a) publish a notice in one or more newspapers circulating in the locality in which the land is situated, and
 - (b) serve a notice on every person who objected, in accordance with paragraph 1 or 2, to the making of the order and has not withdrawn that objection.
 - (2) A notice under sub-paragraph (1) must
 - (a) state that the relevant order has been made, and
 - (b) specify a place where a copy of the order may be inspected at reasonable hours.
 - (3) In this paragraph "relevant person"
 - (a) in relation to an order under section 35, means the person in whose favour the order is made;
 - (b) in relation to a land order, means the operator of the spaceport specified in the order.

Appeals etc

- 7 (1) A person who is aggrieved by the making of an order under section 35 or 37 may apply to the appropriate court for the order, or any provision of the order, to be quashed.
 - (2) An application under sub-paragraph (1) may be made on the ground
 - (a) that the order, or a provision of it, is not within the powers of the Secretary of State, or
 - (b) that any requirement of this Act has not been complied with in relation to that order.

- (3) An application under sub-paragraph (1) must be made within the period of six weeks beginning with the day on which the notice that the order had been made was published under paragraph 6(1)(a).
- (4) Where an application is made under sub-paragraph (1), the appropriate court
 - (a) may by interim order suspend the operation of the order, or of any of its provisions, until the proceedings are finally determined;
 - (b) may, if satisfied as required by sub-paragraph (5), quash the order or any of its provisions.
- (5) The appropriate court is satisfied as required by this sub-paragraph if it is satisfied
 - (a) that the order, or any of its provisions, are outside the powers of the Secretary of State, or
 - (b) that the interests of the applicant have been substantially prejudiced by any requirement of this Act not having been complied with.
- (6) The appropriate court may exercise its powers under sub-paragraph (4) either generally or insofar as the applicant is affected by the order or any of its provisions.
- (7) In this paragraph "the appropriate court"
 - (a) in England and Wales and Northern Ireland, means the High Court;
 - (b) in Scotland, means the Court of Session.
- 8 (1) A proposal to make an order under section 35 or 37 may not be challenged in any legal proceedings.
 - (2) An order made under section 35 or 37 may not be challenged in any legal proceedings.
 - (3) An order made under section 35 or 37 becomes operative at the end of the period of six weeks beginning with the day on which the notice that the order had been made was published under paragraph 6(1)(a).
 - (4) This paragraph is subject to paragraph 7.

Compensation in connection with orders under section 35

- 9 (1) A person who has an interest in land the value of which is diminished in consequence of the coming into operation of an order under section 35 is entitled to recover compensation for the diminution from the person in whose favour the order was made.
 - (2) The provisions of the Land Compensation Act have effect accordingly.
 - (3) In this paragraph, "the Land Compensation Act"
 - (a) in the case of land in England and Wales, means the Land Compensation Act 1961;
 - (b) in the case of land in Scotland, means the Land Compensation (Scotland) Act 1963;
 - (c) in the case of land in Northern Ireland, means the Land Compensation (Northern Ireland) Order 1982 (despite paragraph 4 of Schedule 1 to that Order, which confines the operation of the Order to matters that were within the legislative competence of the Parliament of Northern Ireland).

- 10 (1) Where an interest in land is subject to a mortgage or, in Scotland, to a heritable security
 - (a) any compensation payable under this Schedule in respect of the diminution in the value of the interest is to be assessed as if the interest was not subject to the mortgage or heritable security;
 - (b) a claim for any such compensation may be made by the mortgagee of the interest or, in Scotland, by any creditor of the heritable security of the interest;
 - (c) a mortgagee or, in Scotland, a creditor of a heritable security is not entitled to claim compensation under this Schedule in respect of their interest as such;
 - (d) the compensation payable in respect of the interest subject to the mortgage or heritable security may be paid to whichever of the claimants the Secretary of State thinks proper, and is to be applied by that claimant in whatever way is
 - (i) agreed by the parties interested, or
 - (ii) in default of agreement, determined by arbitration.
 - (2) Sub-paragraph (1)(b) does not prevent the person entitled to the interest making a claim for compensation.
 - (3) In this paragraph –

"mortgage" includes an equitable charge and any other encumbrance, and also includes a sub-mortgage;

"mortgagee" is to be read accordingly;

"heritable security" has the meaning given in section 113(1) of the Land Registration etc. (Scotland) Act 2012.

- 11 (1) Where land is damaged in the exercise of a power conferred by an order under section 35, the person in whose favour the order was made must pay just compensation to the persons interested in the land.
 - (2) Where a dispute arises as to the amount of any such compensation or the persons to whom is it payable, the dispute is to be referred to and determined by the appropriate tribunal.
- 12 A statutory undertaker is not entitled to recover compensation under paragraph 10 or 11.

Interpretation

13 In this Schedule "owner" has the meaning given in section 56 of the Civil Aviation Act 1982.

SCHEDULE 6

Section 38

Provisions relating to orders and directions under 38

Orders under section 38: procedure

- 1 (1) An order under section 38 is subject to special parliamentary procedure.
 - (2) Sub-paragraph (1) does not apply to an order relating to land in Northern Ireland.

- (3) Before making an order under this section, the Secretary of State must consult every local authority within whose area is situated the whole or part of the land to which the proposed order relates.
- (4) Despite section 2(1) of the Statutory Orders (Special Procedure) Act 1945, the duty in sub-paragraph (3) above does not excuse the Secretary of State from complying with the requirements of Schedule 1 to that Act.

Procedure after giving a direction under order made under section 38

- 2 (1) Immediately after the Secretary of State has given a direction under an order made under section 38 (a "section 38 direction") the appropriate person must—
 - (a) publish a notice in one or more newspapers circulating in the locality in which the specified area of land is situated, and
 - (b) serve a notice on the persons specified in sub-paragraph (4).
 - (2) In this Schedule "the appropriate person" means the person in respect of whom the order under section 38 was made (see subsection (4) of that section).
 - (3) A notice under sub-paragraph (1) must
 - (a) state that the direction has been given;
 - (b) state the effect of the direction.
 - (4) The specified persons are
 - (a) in the case of a direction given for the purpose specified in paragraph
 (b) of subsection (5) of section 38
 - (i) every owner, lessee and occupier of land to which the right of way is appurtenant or, in Scotland, of the dominant tenement, and
 - (ii) every local authority in whose area any of that land is situated;
 - (b) in the case of a direction given for any other purpose specified in that subsection
 - (i) every owner, lessee and occupier of land to which the direction relates, and
 - (ii) every local authority in whose area any of that land is situated;
 - (c) in the case of a direction restricting the installation of apparatus or extinguishing rights to install or maintain apparatus, every person whose rights to install or maintain such apparatus are affected by the direction;
 - (d) in the case of a direction requiring the removal of any apparatus, the person entitled to maintain the apparatus that is required to be removed under the direction.

Appeals

- 3 (1) A person who is aggrieved by the giving of a section 38 direction may apply to the appropriate court for the direction, or any provision of the direction, to be quashed.
 - (2) An application under sub-paragraph (1) may be made on the ground that –

- (a) the direction, or a provision of it, is not within the powers of the Secretary of State, or
- (b) any requirement of this Act has not been complied with in relation to the direction.
- (3) An application under sub-paragraph (1) must be made within the period of six weeks beginning with the day on which the notice that the section 38 direction has been given was published under paragraph 2(1)(a).
- (4) Where an application under sub-paragraph (1) is made, the appropriate court
 - (a) may by interim order suspend the operation of the direction, or of any of its provisions, until the proceedings are finally determined, and
 - (b) may, if satisfied as required by sub-paragraph (5), quash the direction or any of its provisions.
- (5) The appropriate court is satisfied as required by this sub-paragraph if it is satisfied
 - (a) that the direction is, or any of its provisions are, outside the powers of the Secretary of State, or
 - (b) that the interests of the applicant have been substantially prejudiced by any requirements of this Act not being complied with.
- (6) The appropriate court may exercise its powers under sub-paragraph (4) either generally or insofar as the direction (or any of its provisions) affects the applicant.
- (7) In this paragraph "the appropriate court"
 - (a) in England and Wales and Northern Ireland, means the High Court;
 - (b) in Scotland, means the Court of Session.
- 4 (1) A section 38 direction may not be challenged in any legal proceedings.
 - (2) A section 38 direction becomes operative at the end of the period of six weeks beginning with the day on which the notice of the giving of the direction was first published under paragraph 2(1)(a).
 - (3) This paragraph is subject to paragraph 3.

Compensation

- 5 Any person having an interest in land the value of which is diminished as a result of the coming into operation of a section 38 direction is entitled to recover compensation for the diminution from the appropriate person. Paragraph 10 of Schedule 5 has effect in relation to any compensation payable under this paragraph as it has effect in relation to any compensation payable under paragraph 9 of that Schedule.
- 6 (1) A person who sustains damage by being disturbed in the enjoyment of a right in or over land as the result of the coming into operation of a section 38 direction is entitled to recover compensation from the appropriate person in respect of that damage.
 - (2) This paragraph does not apply to damage that consists of the diminution in the value of an interest in land.

- 7 The appropriate person must pay compensation to a person in respect of any expenditure incurred by the person in complying with a section 38 direction.
- 8 The compensation payable to any person under paragraph 5, 6 or 7 is to be reduced by the value to the person of any timber, apparatus or any other materials removed for the purposes of complying with the direction.
- 9 For the purposes of assessing compensation under this Schedule, the land compensation provisions (so far as applicable) have effect as they have effect for the purpose of assessing compensation for the compulsory acquisition of land, subject to any necessary modifications.

"The land compensation provisions" has the meaning given in section 37(10).

10 Where any dispute arises as to whether compensation is payable under this Schedule, the amount of compensation payable or the persons to whom it is payable, the dispute is to be referred to and determined by the appropriate tribunal.

Statutory undertakers

11 A statutory undertaker is not entitled to recover compensation under this Schedule in a case in which compensation is recoverable by the undertaker under Schedule 7.

Interpretation

12 In this Schedule "owner" has the meaning given in section 56 of the Civil Aviation Act 1982.

SCHEDULE 7

Section 43

POWERS IN RELATION TO LAND: SPECIAL PROVISIONS RELATING TO STATUTORY UNDERTAKERS

Part 1

COMPENSATION

Application of this Part

- 1 (1) Subject to sub-paragraphs (2) and (3), this Part of this Schedule has effect with regard to the compensation to be paid to a statutory undertaker in respect of
 - (a) a right created under an order made under section 35 or 37 ("the relevant order") in relation to land held by the statutory undertaker for the purposes of carrying on its undertaking, or
 - (b) a direction under an order made under section 38 that affects -
 - (i) any building, structure or apparatus held or used by the statutory undertaker for the purposes of the undertaker's undertaking,
 - (ii) any of the statutory undertaker's rights to install or maintain apparatus for those purposes, or

- (iii) any right of way enjoyed by the statutory undertaker for those purposes.
- (2) Compensation under sub-paragraph (1)(a) is not payable unless the Secretary of State, in response to a representation made to him or her before the expiration of the time within which objections may be made to the relevant order, certifies that the land is in respect of its nature or situation of a kind that is comparable less with the generality of land than with land held for the purposes of the carrying on of statutory undertakings.
- (3) Compensation under sub-paragraph (1)(b) is not payable unless the Secretary of State, in response to a representation made to him or her before the expiration of the time within which an application may be made to the court under paragraph 3 of Schedule 6, certifies that the building or other structure is in respect of its nature or situation comparable less with the generality of buildings or structures than with buildings or structures held for the purpose of the carrying on of statutory undertakings.

Assessment of compensation

2 The amount of the compensation, if not agreed, is to be assessed by the appropriate tribunal.

Amount of compensation

- 3 (1) The amount of the compensation is
 - (a) in the case of land in England and Wales, an amount calculated in accordance with subsections (2) to (5), (7) and (8) of section 280 the Town and Country Planning Act 1990 ("the 1990 Act");
 - (b) if the case of land in Scotland, an amount calculated in accordance with subsections (2) to (5), (7) and (8) of section 233 of the Town and Country Planning (Scotland) Act 1997 ("the 1997 Act").
 - (2) The provisions of section 280 of the 1990 Act specified in sub-paragraph (1)(a) have effect for the purposes of this paragraph as if
 - (a) in subsection (2)(c), the words "is under section 279(2) or (3) and" were omitted;
 - (b) after that paragraph of that subsection there were inserted
 - "(d) in respect of the imposition of a requirement to demolish a building or other structure either wholly or partly, any expense reasonably incurred by the person carrying on the undertaking in complying with the requirement, reduced by the value to that person of any materials from the demolished building or structure, or from the demolished part of the building or structure, as the case may be;";
 - (c) in the definition of "proceeding giving rise to compensation" in subsection (8)
 - (i) in paragraph (a), the words "except in relation to compensation under section 279(4)" were omitted;
 - (ii) in that paragraph, the reference to the imposition of a requirement included a reference to anything that may be done as a result of an order made under section 35, 37 or 38;
 - (iii) paragraph (b) were omitted.

- (3) The provisions of section 233 of the 1997 Act specified in sub-paragraph (1)(b) have effect for the purposes of this paragraph as if
 - (a) in subsection (2)(c), the words "is under section 232(2) or (3) and" were omitted;
 - (b) after that paragraph of that subsection there were inserted
 - "(d) in respect of the imposition of a requirement to demolish a building or other structure either wholly or partly, any expense reasonably incurred by the person carrying on the undertaking in complying with the requirement, reduced by the value to that person of any materials from the demolished building or structure, or from the demolished part of the building or structure, as the case may be;
 - (c) in the definition of "proceeding giving rise to compensation" in subsection (8)
 - (i) in paragraph (a), the words "except in relation to compensation under section 232(4)" were omitted;
 - (ii) in that paragraph, the reference to the imposition of a requirement included a reference to anything that may be done as a result of an order made under section 35, 37 or 38;
 - (iii) paragraph (b) were omitted.

Part 2

ADJUSTMENT OF THE FUNCTIONS OF STATUTORY UNDERTAKERS

Modification of powers and duties of statutory undertakers

- 4 (1) The Secretary of State may make an order under this paragraph if satisfied, on the representation of a person carrying on a statutory undertaking, that it is expedient to do so in order to facilitate an adjustment of the carrying on of the undertaking necessitated by
 - (a) the making or proposed making of an order under section 35 or 37,
 - (b) the confirmation or proposed confirmation of such an order, or
 - (c) any direction given or proposed to be given under an order made under section 38.
 - (2) An order under this paragraph may extend or modify the powers and duties of a statutory undertaker.
 - (3) An order under this paragraph may make provision
 - (a) giving a statutory undertaker powers to acquire (whether compulsorily or by agreement) specified land or to erect or construct specified buildings or works;
 - (b) applying, in relation to the acquisition of specified land or the construction of specified works, enactments relating to the acquisition of land or the construction of works.

"Specified" means specified in the order.

- (4) An order under this paragraph may contain incidental and supplementary provision.
- (5) Sub-paragraphs (3) and (4) do not limit sub-paragraph (2).

Relief of statutory undertakers from obligations

- 5 (1) Where this paragraph applies, the Secretary of State may by order direct that a statutory undertaker is relieved from the fulfilment of an obligation either
 - (a) absolutely, or
 - (b) to the extent specified in the order.
 - (2) This paragraph applies where, on the representation of a person carrying on a statutory undertaking, the Secretary of State is satisfied that, as a result of the making or confirmation of an order under section 35 or 37, or the giving of any direction under an order made under section 38, it is impracticable for the person to fulfil an obligation incurred in connection with the carrying on of the undertaking.

Procedure before making an order under paragraph 4 or 5

- 6 (1) As soon as possible after making a representation under paragraph 4 or 5, the statutory undertaker must
 - (a) publish a notice in the manner directed, and
 - (b) if directed to do so, serve a notice on such persons or classes of persons as directed.
 - (2) A notice under sub-paragraph (1) must
 - (a) be in the form directed;
 - (b) give such particulars about the representation as directed;
 - (c) specify the day by which, and the manner in which, objections to the making of the order on the representation may be made.
 - (3) In this paragraph "directed" means directed by the Secretary of State.

Objections to order under paragraph 4

- 7 (1) Where no objection is made under paragraph 6, or all objections are withdrawn, the Secretary of State may make the relevant order.
 - (2) If an objection is made under paragraph 6 and not withdrawn
 - (a) in the case of land in England and Wales, subsections (3) to (11) of section 278 of the 1990 Act (objections to orders under sections 275 and 277 of that Act) have effect
 - (i) in relation to an order under paragraph 4, as if it were an order under section 275 of that Act;
 - (ii) in relation to an order under paragraph 5, as if it were an order under section 277 of that Act;
 - (b) in the case of land in Scotland, subsections (3) to (10) of section 231 of the 1997 Act (objections to orders under sections 228 and 230 of that Act) have effect—
 - (i) in relation to an order under paragraph 4, as if it were an order under section 228 of that Act;
 - (ii) in relation to an order under paragraph or 5, as if it were an order under section 230 of that Act;
 - (c) subject to those provisions, the Secretary of State may make the relevant order.

Special parliamentary procedure

- 8 (1) An order under paragraph 4 is subject to special parliamentary procedure.
 - (2) An order under paragraph 5 is subject to special parliamentary procedure if -
 - (a) an objection is made under paragraph 6 to the making of the order, and
 - (b) the objection is not withdrawn before the order is made.

SCHEDULE 8

Section 56

APPEALS IN CONNECTION WITH SPACE ACTIVITIES

Part 1

THE APPEAL PANEL

The Appeal Panel

- 1 (1) The Secretary of State must, by regulations, establish a panel to consider appeals (referred to in this Schedule as "the Panel").
 - (2) In this Schedule (other than Part 2) "appeal" means an appeal under paragraph 2, 3 or 4.
 - (3) Regulations under sub-paragraph (1) may in particular make provision
 - (a) about the composition of the Panel (including the appointment of one of the members of the Panel as its Chair);
 - (b) about the terms of a person's appointment as a member of the Panel;
 - (c) for the payment of remuneration, allowances or expenses to members of the Panel;
 - (d) subject to the provisions of this Schedule, about the powers of the Panel;
 - (e) about the quorum of the Panel;
 - (f) about the procedure to be followed by the Panel in making its decisions;
 - (g) about the appointment of staff to assist the Panel.

Part 2

RIGHTS OF APPEAL

Appeals: refusal to grant licence

- 2 (1) An appeal lies to the Panel against
 - (a) a decision of the regulator to refuse an application for a licence under this Act;
 - (b) a decision of the Secretary of State to refuse an application for a licence under section 4 of the Outer Space Act 1986.
 - (2) An appeal under this paragraph may be brought only by the applicant.

Appeals: decisions in connection with licences

- 3 (1) An appeal lies to the Panel against a decision of the regulator or the Secretary of State
 - (a) to grant a licence subject to conditions;
 - (b) to refuse to renew a licence;
 - (c) to refuse to consent to the transfer of a licence;
 - (d) to vary, or refuse to vary, a licence;
 - (e) to suspend a licence;
 - (f) to revoke a licence.
 - (2) An appeal under this paragraph may be brought
 - (a) in the case of decision specified in sub-paragraph (1)(c), only by the holder of the licence or the person to whom the holder intended to transfer the licence;
 - (b) otherwise, only by the holder of the licence.
 - (3) In this paragraph "licence" means a licence under this Act or under the Outer Space Act 1986.

Appeals: other decisions

- 4 (1) An appeal lies to the Panel against
 - (a) any other decisions of the regulator under this Act, or under regulations made under this Act, that are prescribed;
 - (b) any regulatory decisions of a qualifying health and safety authority that are prescribed;
 - (c) any other decisions of the Secretary of State under the Outer Space Act 1986 that are prescribed.
 - (2) An appeal against any such decision may be brought only by a prescribed person.
 - (3) In this paragraph
 - "qualifying health and safety authority" has the meaning given in section 19(2);
 - "regulatory decision", in relation to a qualifying health and safety authority, means a decision made by the authority in carrying out a function that it is authorised to perform under section 19(1)(b).

Part 3

DETERMINATION OF APPEAL

Permission to appeal

- 5 (1) An appeal may be brought only with the permission of the Panel.
 - (2) An application for permission to appeal under this Schedule may be made only by a person who, if permission is granted, will be entitled to bring the appeal.
 - (3) An application for permission to appeal under this Schedule must be made within the prescribed period.

Circumstances in which the Panel may not accept an application

- 6 (1) Where a person appeals to the Panel and there is no appealable decision, the Panel may not accept the appeal.
 - (2) Where the Panel does not accept an appeal, it must
 - (a) notify the person making the appeal and the person who made the decision, and
 - (b) take no further action on that appeal.
 - (3) In this paragraph "appealable decision" means a decision from which an appeal lies to the Panel under this Schedule.

Determination of application for permission to appeal

- 7 (1) The Panel may refuse permission to appeal under this Schedule only on the ground that
 - (a) the appeal is brought for reasons that are trivial or vexatious, or
 - (b) the appeal does not have a reasonable prospect of success.
 - (2) The Panel may grant permission to appeal under this Schedule subject to conditions.

When appeals may be allowed

- 8 The Panel may allow an appeal only to the extent that it is satisfied that the decision appealed against was wrong on one or more of the following grounds—
 - (a) that the decision or direction was based on an error of fact;
 - (b) that the decision or direction was wrong in law;
 - (c) that an error was made in the exercise of a discretion.

Determination of appeal

- 9 (1) Where it does not allow an appeal, the Panel must confirm the decision appealed against.
 - (2) Where it allows an appeal, the Panel must do one or more of the following
 - (a) quash the decision appealed against;
 - (b) vary the decision appealed against;
 - (c) remit the matter that is the subject of the decision appealed against to the person who made the decision for reconsideration and determination in accordance with the relevant provisions and any directions given by the Panel.
 - (3) Where it allows only part of an appeal
 - (a) sub-paragraph (2) applies in relation to the part of the decision in respect of which the appeal is allowed, and
 - (b) sub-paragraph (1) applies to the rest of that decision.
 - (4) The Panel must not give a direction under this paragraph that requires a person to do anything that the person would not have power to do apart from this paragraph.

- (5) A person to whom a direction is given under this paragraph must comply with it.
- (6) A direction given under this paragraph is enforceable
 - (a) in England and Wales and Northern Ireland, as if it were an order of the High Court, and
 - (b) in Scotland, as if it were an order of the Court of Session.
- (7) In this paragraph "the relevant provisions"
 - (a) where the decision appealed against was made under this Act, means the provisions of this Act;
 - (b) where the decision appealed against was made under regulations made under this Act, means those regulations;
 - (c) where the decision appealed against was made under the Outer Space Act 1986, means the provisions of that Act.

Determination of appeal: further provision

- 10 (1) Regulations may prescribe
 - (a) the form in which a determination of the Panel is to be made;
 - (b) the time at which a determination of the Panel takes effect;
 - (c) persons to whom copies of a determination of the Panel are to be sent.
 - (2) Regulations may make provision about publication of determinations of the Panel.

Determination of appeal: time limit

11 The Panel must determine an appeal within whatever period is prescribed (if any).

PART 4

PROCEDURE

Representations in relation to an application for permission to appeal

- 12 (1) This paragraph applies where the relevant person wishes to make representations to the Panel in relation to an application under paragraph 5 for permission to appeal against a decision.
 - (2) The relevant person must make representations in writing within the prescribed period.
 - (3) The period prescribed for the purposes of sub-paragraph (2) must be one that ends after the end of the period prescribed for the purposes of 5(3).
 - (4) The relevant person must send a copy of its representations to the person who made the application for permission to appeal.
 - (5) In this paragraph "the relevant person" means the person who made the decision which is the subject of the appeal.

Intervention in an appeal

- 13 (1) Where an application is made under paragraph 5 for permission to appeal against a decision, a person may make an application for permission to intervene in the appeal to the Panel.
 - (2) An application for permission to intervene may be made before the end of the prescribed period.
 - (3) An application for permission to intervene may be made after the end of that period only with the leave of the Panel.
 - (4) The applicant must send a copy of the application
 - (a) to the appellant, and
 - (b) to the person who made the decision which is the subject of the appeal.

Determination of application for permission to intervene

- 14 (1) The Panel may grant permission to intervene in an appeal only if it is satisfied
 - (a) that the applicant has a sufficient interest in the decision which is the subject of the appeal, and
 - (b) that allowing the applicant to intervene is necessary or desirable for the proper resolution of the appeal.

Procedure regulations

- 15 (1) Regulations may make provision regulating the conduct and disposal of appeals.
 - (2) Regulations may make provision supplementing the provisions of this Schedule in relation to any application or requirement for which this Schedule provides.
 - (3) Regulations may in particular make provision
 - (a) about the manner in which the Panel makes its decisions;
 - (b) about the form of an application for permission to appeal under this Schedule and the information to be provided with an application;
 - (c) about the conditions subject to which permission to appeal may be granted;
 - (d) requiring information to be verified by a statement of truth;
 - (e) about the time limits for taking any step in an appeal before the Panel;
 - (f) about intervention in an appeal;
 - (g) about the matters to be taken into account (or disregarded) by the Panel when considering an appeal;
 - (h) about the production of documents or information to the Panel;
 - (i) about the holding of oral hearings;
 - (j) for dealing with matters without a hearing;
 - (k) about evidence (including the taking of evidence on oath and the administration of oaths);
 - (l) about the circumstances in which an appeal may be dismissed by the Panel;

- (m) about withdrawal-
 - (i) of an application for permission to appeal under this Schedule or, after permission has been granted, of an appeal,
 - (ii) of an application for permission to intervene or, after permission has been granted, of an intervention, or
 - (iii) of any other application in connection with an appeal;
- (n) about the consequences of non-payment of a fee.
- (4) Regulations under this paragraph
 - (a) may make provision to enable the Panel to require the reimbursement of any fee required to be paid by a party to an application or appeal under this Schedule by another party to that application or appeal, but
 - (b) may not confer on the Panel any other power (whether by order or otherwise) to require a party to an application or appeal under this Schedule to make payments to another party to the application or appeal in respect of costs.
- (5) Sub-paragraphs (2) to (4) do not limit sub-paragraph (1).

Part 5

Fees

Fees

- 16 (1) The Secretary of State may by regulations prescribe fees payable in respect of anything dealt with by the Panel under this Schedule.
 - (2) Regulations under this paragraph may, in particular, make provision about-
 - (a) the scale or rates of fees;
 - (b) exemptions from or reductions in fees;
 - (c) remission of fees in whole or in part.
 - (3) Any prescribed fee must be reasonable and proportionate to the costs to which it relates.
 - (4) Fees payable under sub-paragraph (1) are recoverable summarily as a civil debt by the Secretary of State.
 - (5) Sub-paragraph (4) does not apply to recovery in Scotland of fees payable under this paragraph.

SCHEDULE 9

Section 57

CHARGING SCHEMES

Power of charging authority to make charging scheme

- 1 (1) In this Schedule "charging authority" means
 - (a) the Secretary of State;
 - (b) the regulator (if the regulator is not the Secretary of State).

- (2) A charging authority may make a scheme (a "charging scheme") providing for payment to the authority of charges in respect of the performance by the authority of functions that are
 - (a) conferred on the authority by or under this Act, and
 - (b) specified in the scheme.
- (3) Where provision is made in a charging scheme for a charge to be paid in connection with the performance of a function by a charging authority, it is the duty of the charging authority to charge accordingly.
- (4) But the charging authority may waive a charge (in whole or in part) if it thinks fit to do so in a particular case.
- (5) This paragraph does not affect a charging authority's power to enter into an agreement for the payment to it of charges in respect of the performance of functions in respect of which a charging scheme does not provide for the making of a charge.
- (6) A charging scheme may vary or revoke a previous charging scheme.

Content of charging schemes

- 2 (1) A charging scheme may
 - (a) specify the amount of a charge or a scale of charges by reference to which the amount is to be ascertained, or
 - (b) provide that a charge is to be of an amount determined by the scheme or by the charging authority under the scheme.
 - (2) A charging scheme may provide that the charge for the performance or provision of a particular function must not exceed an amount specified in the scheme.
 - (3) A charging scheme may specify factors to which the charging authority may or must have regard when ascertaining or determining the amount of a particular charge.
 - (4) A charging scheme may, in relation to each charge specified in it, specify -
 - (a) the manner in which the charge is to be paid;
 - (b) the time at which the charge is to be paid;
 - (c) the person by whom the charge is to be paid.
 - (5) A charging scheme may specify different charges for different cases.

Consultation

- 3 Before making a charging scheme, a charging authority
 - (a) must consult the persons who, in the charging authority's opinion, are likely to be affected by the scheme or such of those persons as it thinks fit, and
 - (b) if the charging authority is not the Secretary of State, must then consult the Secretary of State.

Commencement of charging schemes by regulations

4 A charging scheme (or an amendment to a charging scheme) has effect only from the date specified in regulations setting out the scheme (or the scheme as amended).

Effect of licence conditions

5 The inclusion in a licence under this Act of a condition as to payment of charges determined under a charging scheme does not prevent the charging authority from recovering such charges as a debt due to the authority.

SCHEDULE 10

Section 62

MINOR AND CONSEQUENTIAL AMENDMENTS

Civil Aviation Act 1982 (c. 16)

- 1 In section 11 of the Civil Aviation Act 1982 (charges), after subsection (8) insert—
 - "(9) Charges shall not be determined in pursuance of this section in respect of any function conferred on the CAA by regulations under section 14 of the Spaceflight Act 2017."

Aviation Security Act 1982 (c. 36)

- 2 (1) Section 38 of the Aviation Security Act 1982 (interpretation etc) is amended as follows.
 - (2) After subsection (1) insert
 - "(1A) Subject to subsection (1D), a reference in this Act to an aircraft includes a reference to a medium-range rocket.
 - (1B) In subsection (1A) "rocket" means a projectile of mainly cylindrical or similar shape that can be propelled from or above the earth by combustion of its fuel (or fuel and oxidant).
 - (1C) For the purposes of subsection (1A) a rocket is a "medium-range" rocket if
 - (a) the total impulse of its motor or combination of motors exceeds 160 Newton-seconds, but
 - (b) it is not capable of operating above the stratosphere.
 - (1D) The Secretary of State may by order
 - (a) provide that subsection (1A) does not apply to any specified provisions of this Act;
 - (b) provide for any provision of this Act, as it has effect by virtue of subsection (1A), to apply with specified modifications."
 - (3) In subsection (5), after "subsection (1)" insert "or (1D)".

Airports Act 1986 (c. 31)

- 3 In section 82 of the Airports Act 1986 (general interpretation), after subsection (1B) insert
 - "(1C) Subject to subsection (1F), a reference in this Act to an aircraft includes a reference to a medium-range rocket.
 - (1D) In subsection (1C) "rocket" means a projectile of mainly cylindrical or similar shape that can be propelled from or above the earth by combustion of its fuel (or fuel and oxidant).
 - (1E) For the purposes of subsection (1C) a rocket is a "medium-range" rocket if
 - (a) the total impulse of its motor or combination of motors exceeds 160 Newton-seconds, but
 - (b) it is not capable of operating above the stratosphere.
 - (1F) The Secretary of State may by order
 - (a) provide that subsection (1C) does not apply to any specified provisions of this Act;
 - (b) provide for any provision of this Act, as it has effect by virtue of subsection (1C), to apply with specified modifications."

Outer Space Act 1986 (c. 38)

- 4 (1) Section 1 of the Outer Space Act 1986 (activities to which that Act applies) is amended as follows.
 - (2) Omit "whether carried on in the United Kingdom or elsewhere".
 - (3) At the end of the existing text (which becomes subsection (1)) insert -
 - "(2) This Act does not apply to activities carried on in the United Kingdom (and accordingly does not apply to activities requiring authorisation under section 3(1) of the Spaceflight Act 2017)."
- 5 In section 4 of that Act (grant of licence) omit subsection (3)(d).
- 6 After that section insert –

"4A Charges

- (1) The Secretary of State may by regulations make a scheme
 - (a) for determining the charges which are payable to the Secretary of State in respect of the performance of such of his functions under this Act as are specified in the scheme;
 - (b) specifying the charge payable to the Secretary of State for inspecting a copy of the register of space objects (see section 7).
- (2) A scheme under this section may, as respects any of the functions mentioned in subsection (1)(a)
 - (a) specify the amount of the charge or a scale of charges by reference to which that amount is to be determined or provide that the charges are to be of such amount, not exceeding that specified in the scheme, as may be decided by the Secretary of State, having regard to the expense incurred

by the Secretary of State and to such other factors (if any) as may be so specified;

- specify different charges for different cases; (b)
- specify the description of person who is liable to pay the (c) charge;
- specify the time at which the charge is to be paid. (d)
- (3) A scheme under this section may specify the manner in which any charge is to be paid.
- A scheme made under this section may revoke or vary a previous (4) scheme so made.
- Before making a scheme under this section, the Secretary of State (5) must consult the persons who, in his opinion, are likely to be affected by the scheme or such of those persons as he thinks fit.
- (6) Where provision is made for a charge to be paid in connection with an application for a licence under a scheme, it is the duty of the Secretary of State to charge accordingly. But the Secretary of State may waive the whole or part of the charge if the Secretary of State thinks fit to do so in a particular case.
- The inclusion in a licence of a condition as to the payment of charges (7)determined under a charging scheme does not prevent the Secretary of State from recovering such charges as a debt due to the Secretary of State."
- 7 (1) In section 5 of that Act (terms of licence), subsection (2) (licence conditions) is amended as follows.
 - (2) After paragraph (c) insert
 - requiring the licensee to pay to the Secretary of State (whether on grant of a licence, subsequently or both) any charges determined under a scheme under section 4A;"
 - (3) After paragraph (d) insert
 - "(da) designed to secure compliance with
 - obligations of the United Kingdom under agreements entered into with other countries, and
 - (ii) any other international obligations of the United Kingdom;".
 - (4) In paragraph (e)
 - (a) at the end of sub-paragraph (ii) insert "and";
 - omit sub-paragraph (iii). (b)
- 8 After section 6 of that Act insert –

"6A Appeals

Schedule 8 to the Spaceflight Act 2017 makes provision for appeals against decisions of the Secretary of State under this Act."

9 In section 7 of that Act (register of space objects), in subsection (3), for "such fee as the Secretary of State may prescribe" substitute "such charge as is specified (if any) in a scheme made under section 4A."

Aviation and Maritime Security Act 1990 (c. 31)

10 After section 48 of the Aviation and Maritime Security Act 1990 insert –

"48A Application of Act to medium-range rockets

- "(1) Subject to subsection (4), a reference in this Act to an aircraft includes a reference to a medium-range rocket.
- (2) In this section "rocket" means a projectile of mainly cylindrical or similar shape that can be propelled from or above the earth by combustion of its fuel (or fuel and oxidant).
- (3) For the purposes of this section a rocket is a "medium-range" rocket if
 - (a) the total impulse of its motor or combination of motors exceeds 160 Newton-seconds, but
 - (b) it is not capable of operating above the stratosphere.
- (4) The Secretary of State may by order
 - (a) provide that subsection (1) does not apply to any specified provisions of this Act;
 - (b) provide for any provision of this Act, as it has effect by virtue of subsection (1), to apply with specified modifications.
- (5) The power to make an order under subsection (4) is exercisable by statutory instrument.
- (6) Any statutory instrument containing an order under subsection (4) shall be subject to annulment in pursuance of a resolution of either House of Parliament."

Transport Act 2000 (c. 38)

- 11 In section 70 of the Transport Act 2000 (general duty of CAA), in subsection (2), after paragraph (c) insert
 - "(ca) to take account of any guidance relating to space activities or sub-orbital activities (within the meaning of the Spaceflight Act 2017) given to the CAA by the Secretary of State;".

Energy Act 2013 (c. 32)

- 12 In section 89 of the Energy Act 2013 (provision of information or advice to relevant authorities), in subsection (8), after paragraph (h) insert
 - "(i) a person appointed by regulations under section 14 of the Spaceflight Act 2017."

SPACEFLIGHT BILL EXPLANATORY NOTES

What these notes do

- These Explanatory Notes have been prepared by Both the Department for Transport and the United Kingdom Space Agency in order to assist the reader of the Bill and to help inform debate on it. They do not form part of the Bill and have not been endorsed by Parliament.
- These Explanatory Notes explain what each part of the Bill will mean in practice; provide background information on the development of policy; and provide additional information on how the Bill will affect existing legislation in this area.
- These Explanatory Notes might best be read alongside the Bill. They are not, and are not intended to be, a comprehensive description of the Bill.

Table of Contents

Subject	Page of these Notes		
Overview of the Bill	4		
Policy background	4		
Consultation	5		
Legal background	5		
Territorial extent and application	7		
Commentary on provisions of Bill	8		
Chapter 1: Regulation of spaceflight etc Clause 1: Introduction and main definitions Clause 2: Duties and supplementary powers of the regulator	8 7 8		
Clause 3: Prohibition of unlicensed spaceflight etc Chapter 2: Range control services Clause 4: Range Clause 5: Range control services Clause 6 Provision of range control services	8 9 9 9 9 9		
Chapter 3: Licences Clause 7: Grant of licences: general Clause 8: Grant of operator licence: safety Clause 9: Grant of spaceport licence Clause 10: Terms of licences Clause 11: Conditions of licences Clause 12: Licences granted for specified periods Clause 13: Transfer, variation, suspension or termination of licence	10 10 10 10 10 10 10 11 11		
Chapter 4: Exercise of functions by bodies other than Secretary of State Clause 14: Power of Secretary of State to appoint person to exercise functions Chapter 5: Individuals taking part in spaceflight activities etc Clause 15: Informed Consent	11 11 11 11		
Clause 16: Training, qualifications and medical fitness Chapter 6: Safety Clause 17: Safety regulations Clause 18: Investigation of Accidents	12 12 12 12		
Clause 19: Assistance etc with performance of regulator's safety functions Chapter 7: Security Clause 20: Security regulations Clause 21: Power to grant exemption from security requirements Clause 22: Spaceport byelaws	12 12 12 13 13		
Clause 23: Provision of advice and assistance on security matters Chapter 8: Enforcement Clause 24: Monitoring and enforcement by regulator Clause 25: Power to give Directions: breach of licence conditions etc. Clause 26: Power to give directions in the interests of safety, security etc Clause 27: Further provisions about directions	13 13 13 13 13 13 14		

Clause 28: Warrants authorising entry or direct action	14
Clause 29: Power to authorise entry in emergencies	14
Chapter 9: Liabilities, indemnities and insurance	14
Clause 30: Liability of Licensee for injury or damage etc	14
Clause 31: Power of Secretary of State to Indemnify Clause 32: Obligation to Indemnify Government etc against claims	15 15
Clause 33: Regulator or health and safety authority not liable for exercise of functions	15
Clause 34: Insurance	15
Chapter 10: Powers in relation to land: acquisition of land etc	16
Clause 35: Powers to obtain rights over land	16
Clause 36: Orders under section 35: offences	16
Clause 37: Power to restrict use of land for purpose to secure safety	16
Clause 38: Power to exercise control over land in interests of spaceflight activities	16
Clause 39: Orders under section 38: consequential amendments of Local Acts	14
Clause 40: Power of entry for purposes of survey	17
Clause 41: Entry to land for survey: compensation	17
Clause 42: Registration of orders under sections 35 and 37	17
Chapter 11: Powers in relation to land: supplementary	17
Clause 43: Special provisions relating to statutory undertakers	17
Clause 44: Displacements from land	17
Clause 45: Compensation in respect of planning decisions relating to spaceport safety etc: England a	and Wales and
Scotland	17
Clause 46 Compensation in respect of planning decisions relating to spaceport safety etc: Northern	Ireland
Clause 47: Powers in relation to land: notices	17
Chapter 12: Offences and Civil Sanctions	17
Clause 48: Application of criminal law to spacecraft	17
Clause 49: Offences on board spacecraft: supplementary	18
Clause 50: Penalties for offences under the Act	18
Clause 51: Offences under regulations	18
Clause 52: Offences under regulations: extended time limit in case of accident investigation etc.	18
Clause 53: Defences	18
Clause 54: Offences by bodies corporate and partnerships	18
Clause 55: Civil sanctions	18
Chapter 13: Appeals	19
Clause 56: Appeals	19
Chapter 14: Miscellaneous	19
Clause 57: Charging schemes	19
Clause 58: Provision of advice and assistance	19
Clause 59: Co-operation between Secretary of State and other bodies	19
Clause 60: Agreements with other countries: compliance with safety requirements etc	19
Clause 61: Use of records and documentary evidence	19
Chapter 15: General	19
Clause 62: Minor and consequential amendments	19
Clause 63: Regulations: General	20
Clause 64: Interpretation	20
Clause 65: Commencement	20
Clause 66: Extent Clause 67:Short title	20
	20
Chapter 16: Schedules	20
Schedule 1: Particular conditions that may be included in operator licences	20
Schedule 2: Training Regulations: further Provision	21
Schedule 3: Safety Regulations: further provision	21 21
Schedule 4: Security Regulations: further provision	21

Schedule 5: Orders under section 35 and 37	21
Schedule 6: Provisions relating to ordersand directions under Section 38	21
Schedule 7: Powers in Relation to Land: special provisions relating to statutory undertakers	21
Schedule 8: Appeals in connection with space activities	22
Schedule 9: Charging schemes	22
Schedule 10: Minor and Consequential amendments	22
Commencement	24
Financial implications of the Bill	24
Compatibility with the European Convention on Human Rights	24
Related documents	24

Annex A - Territorial extent and application in the United Kingdom 25

Overview of the Bill

- 1 Commercial spaceflight is a rapidly growing and evolving sector. The global market for small satellites is expected to grow rapidly in the coming decade, driven by the many small satellites that are expected to be built and launched. At present, by virtue of the Outer Space Act 1986 ("the 1986 Act"), the Secretary of State is able to license activities carried out by United Kingdom nationals and companies in relation to space objects and outer space . The 1986 Act was enacted primarily to implement United Kingdom obligations under the "UN Space Treaties"¹. Launches licensed under the 1986 Act have, to date, involved the licensing the launch of satellites overseas.
- 2 This Bill will provides for the creation of a regulatory framework to enable commercial spaceflight activities (both launch to orbit and sub-orbital spaceflight) to be carried out from spaceports in the United Kingdom.

Policy background

- 3 This measure is part of a wider Government programme to stimulate the market for space activities (primarily small satellite launch) and sub-orbital spaceflight activities in the United Kingdom from 2020.
- 4 The Bill provides for the regulation and licensing of space activities and sub-orbital activities (together referred to as "spaceflight activities"); and any associated activities, including but not limited to the operation of spaceports, mission management facilities and range control functions and sites in the United Kingdom.
- 5 The Bill prohibits the carrying on of spaceflight and specified associated activities without a licence and breach of this prohibition will be an offence. The Secretary of State is the regulatory authority and has a duty to secure public safety in carrying out his or her functions under the Bill.
- 6 There are powers to enable the Civil Aviation Authority ("the CAA") or other persons to carry out functions on behalf of the Secretary of State. Applicants for licences will also be required to meet any requirements set out in secondary legislation made under this Bill.
- 7 The 1986 Act will remain in force, but will be amended so that it will only cover space activities overseas. A number of the provisions in this Bill will mirror those found in the 1986 Act, as this Bill will implement United Kingdom obligations under the UN Space Treaties, insofar as those obligations arise in relation any space activities carried on in the United Kingdom.
- 8 Commercial spaceflight is an innovative, highly technical and fast-changing area for which highly bespoke technologies are being developed. We need the flexibility to adapt and define the regulatory toolkit to keep pace with this emerging market and as the experience of both regulators and industry grows in the United Kingdom. The Bill provides a framework for the development of more detailed rules in secondary legislation. In addition, spaceflight activities will be carried out in accordance with licences, which may contain a wide range of

¹ http://www.unoosa.org/oosa/en/ourwork/spacelaw/treaties.html

These Explanatory Notes relate to the Spaceflight Bill as published in Draft on 21 February 2017 (Bill Cm9421)

conditions.

Consultation

- 9 Since 2013, a cross-Government programme of work has been pursued encompassing three broad strands:
 - Understanding from a regulatory perspective what we need to put in place to enable safe commercial spaceflight in the United Kingdom;
 - Identifying potential locations from which commercial spaceflight operations can be safely launched in the United Kingdom and identifying the infrastructure and facilities that would be required;
 - Identifying options and approaches to attract potential commercial spaceflight operators to the United Kingdom.
- 10 The culmination of this work was the publication of the 2014 Spaceplane Review. Between 15 July and 6 October 2014, the Government sought views on key operational, safety, meteorological, environmental and economic criteria which the Civil Aviation Authority and United Kingdom Space Agency identified to select a suitable site for a spaceport.
- 11 The Spaceplane Review and subsequent consultation focussed primarily on enabling the United Kingdom to become an early adopter of emerging horizontally launched sub-orbital "spaceplane" technologies. However, some respondents advocated the development of a vertical launch capability. The scope of this Bill covers both "spaceplane" and vertical launch technologies.
- 12 As a part of the preparation of the Bill, an industry stakeholder workshop was held on 6 September 2016. The objective of the workshop was to:
 - test current assumptions regarding policy development;
 - identify and understand stakeholder concerns in relation to United Kingdom launch;
 - identify potential gaps / challenges to thinking;
 - ensure that key stakeholders are engaged with development of policy;
 - communicate next steps;
 - share the current timeline in relation to primary and secondary legislation;
 - assist the development of policy for the Bill, small satellite launch and spaceflight, in as open a context as possible.
- 13 The stakeholder workshop helped validate the Government's approach to the development of the Bill.

Legal background

14 The relevant legal background is explained (where relevant) in the policy background section of these Notes.

Territorial extent and application

- 15 The Bill extends to the whole of the United Kingdom, except for certain provisions not extending to Northern Ireland. Both space and aviation are reserved matters. There is a power to also extend provisions to any of the Channel Islands, the Isle of Man and any British overseas territory.
- 16 The application of the provisions is as described in individual clauses. Where a provision applies to "the sea" this is defined to be the territorial waters of the United Kingdom. See the table in Annex A for a summary of the position regarding territorial extent and application of the Bill in the United Kingdom. The table also summarises the position regarding legislative consent motions and matters relevant to Standing Orders Nos. 83J to 83X of the Standing Orders of the House of Commons relating to Public Business.

Commentary on provisions of Bill

Chapter 1: Regulation of spaceflight etc.

Clause 1: Introduction and Main Definitions

- 17 Subsection (1) provides for the regulation of space and sub-orbital activities. In addition, subsection (1) (c) provides for the regulation of any associated activities. Such associated activities include, but are not limited to, spaceports, mission control centres, range control services and training.
- 18 Subsection (2) provides a number of key definitions concerning the activities and craft to be regulated. These are self-explanatory. References to "space object" and "outer space" are not defined as these terms have the meaning given in section 13(1) of the 1986 Act.

Clause 2: Duties and supplementary powers of the regulator

- 19 Subsection (1) imposes a duty on the regulator to carry out its functions relating to spaceflight activities so as to secure public safety. This duty has primacy over the various other matters that the regulator has to take into account in exercising his or her functions under the Act.
- 20 Subsection (2) requires the regulator to exercise functions in a manner best calculated to take into account the matters listed in this subsection. There is no hierarchy between the interests and requirements listed in paragraphs (a) to (g).
- 21 If there is a conflict between any of the matters to be considered under subsection (2), subsection (3) requires the regulator to apply them in a reasonable way, taking account of all factors in the application of the provisions as a whole.
- 22 Subsection (4) provides that the regulator may do anything that the regulator has calculated to be useful to perform its functions. Subsection (5) states that this power is subject to any restrictions arising from other legislation.

Clause 3: Prohibition of unlicensed spaceflight etc.

- 23 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. However, there are exceptions from this requirement which are set out in this clause.
- 24 Subsection (3) provides for situations where a person does not require a licence to carry out spaceflight activities (an operator licence) from the United Kingdom. The exception applies to a licensed operator's employees or agents. Paragraph (b) also enables the possibility that an operator licence may not be required for a person carrying out spaceflight activities, where arrangements have been made between the United Kingdom and another country, confirming that the other country will secure compliance with international obligations on behalf of the United Kingdom. These arrangements are be required to be certified by an Order in Council, issued by and with the advice of the Privy Council and approved by the Her Majesty the Queen.
- 25 Subsection (4) provides for the making of regulations to exempt persons or activities from requiring an operator licence where the Secretary of State is satisfied that a licence is not required in order to secure public safety and compliance with the international obligations of the United Kingdom. Public safety means the health and safety of members of the public and includes the safety of their property (Clause 64).
- 26 Subsection (5) provides that the regulations under subsection (4) may dis-apply the obligations to indemnify Her Majesty's Government from claims under clause 32 where a

licence is not required under the regulations. The regulations also allow for the provision of a cap on that indemnity for activities that do not require a licence. These exemptions correspond to those in section 3 (2) and (3) of the 1986 Act.

- 27 Subsection (6) provides that regulations may set out eligibility criteria for a licensee and may require that prescribed roles are to be undertaken by individuals on behalf of a licensee. "Licensee" in this clause means the holder of an operator licence and the holder of a spaceport licence.
- Subsection (7) makes it an offence for a person to engage in spaceflight activities or to operate a spaceport without a licence. Subsection (8) provides that it is an offence for a person to make a statement that they know to be false or recklessly make a false statement for the purpose of obtaining a licence. This applies whether the person making the statement did so for the purpose of obtaining a licence for themselves or anyone else. Subsections (8) and (9) correspond to section 12(1) (a) and (b) of the 1986 Act, which contain equivalent offences in relation to activities carried on outside of the United Kingdom by United Kingdom nationals and companies.

Chapter 2: Range control services

Clause 4: Range

- 29 Subsection (1) of this clause defines the term "range" in relation to spaceflight activities. This is a zone, consisting of a volume of airspace and, to the extent necessary, an area of land or sea, where restrictions or exclusions are put in place at particular times to secure the area from anything that might pose a hazard to spaceflight activities, or to which those activities might be a hazard.
- 30 Subsection (2) enables regulations to be made concerning range. Such regulations may include, but are not limited to: matters to be taken into account in establishing the range; imposing requirements on persons for the operation of the range; requirements on the person providing the range (which may be a range controller or the Secretary of State)to notify prescribed persons of spaceflight activities taking place in the range.
- 31 Subsection (3) states that the power of the Secretary of State provided in the Transport Act 2000 to give directions to the Civil Aviation Authority (CAA) concerning air navigation may include powers and duties related to range functions. Section (66) subsection (1) of the Transport Act 2000 states: "The Secretary of State may give directions to the CAA imposing duties or conferring powers (or both) on it with regard to air navigation in a managed area".

Clause 5: Range control services

- 32 This clause lists those activities that constitute range control services. Subsection (1) paragraph (g) enables the Secretary of State to make regulations, prescribing other services pursuant to, or connected with, those listed in paragraphs (a) to (f) as range control services.
- 33 Subsection (2) provides that if the Secretary of State prescribes additional range control services under subsection (1) paragraph (g), these must relate to one of the activities or purposes under subsection (2).

Clause 6: Provision of range control services

- 34 Subsection (1) provides that only the Secretary of State or a person authorised by a range control licence may provide range control services.
- 35 Subsection (2) provides relevant definitions relating to the provision of range control services.
- 36 Subsection (3) exempts employees and agents of a licensed range controller from also being

required to hold a range control licence.

- 37 Subsection (4) enables regulations to grants exemptions from licensing requirements for provision of range control services, but only if the Secretary of State is satisfied that the prohibition is not necessary to secure public safety and is not necessary to secure compliance with international obligations.
- 38 Subsection (5) includes other provisions which made be made under regulations for range control services, including matters listed in paragraphs (a) to (f).

Chapter 3: Licences

Clause 7: Grant of licences: General

39 This clause makes provision for the regulator to grant a licence under this Bill to authorise the conduct of spaceflight activities, the operation of a spaceport or to provide range control services in the United Kingdom. The regulator may only grant a licence if satisfied that the granting of a licence will not impair national security; is consistent with the United Kingdom's international obligations; and is not contrary to the national interest. The regulator must also be satisfied that the applicant has the necessary financial and technical resources; is otherwise a fit and proper person; and that persons performing any licensee obligations under the licence are also fit and proper.

Clause 8: Grant of operator licence: safety

- 40 The regulator must not grant an operator licence unless satisfied that the applicant has carried out an assessment of risks to the health and safety of prescribed persons taking part in spaceflight activities to be authorised by the licence. That risk assessment must meet prescribed requirements. In addition, the regulator must not grant an operator licence unless satisfied that the applicant has taken all reasonable steps to minimise risks from spaceflight activities to the health, safety and property of other persons and that those risks are acceptable.
- 41 Subsections (5) and (6) enable the making of regulations concerning matters relating to risk assessment and determining acceptable levels of risk.
- 42 Subsection (7) provides for the issuing of guidance to licence applicants about meeting requirements under this clause.
- 43 Subsection (8) provides that the Secretary of State may issue guidance to the regulator for the purposes of the regulator's functions under this clause, which the regulator must have regard to
- 44 Subsection (9) states that any person carried on a spacecraft or carrier aircraft is taking part in spaceflight activities and so the powers in subsections (2) and (3) may be applied in respect of such persons.

Clause 9: Grant of spaceport licence

45 The regulator must not grant a licence to operate a spaceport unless satisfied that risks to public safety and any other requirements prescribed in secondary legislation are met.

Clause 10: Terms of licences

46 This clause sets out the terms which may or must be contained in a licence authorising spaceflight activities, the operation of a spaceport or the provision of range control services.

Clause 11: Conditions of licences

- 47 This clause permits the regulator to attach conditions to an operator licence, a spaceport licence and a range control licence. A list of possible conditions is set out in Schedule 1 but this is not exhaustive and further conditions may be specified.
- 48 Subsection (3) enables regulations to be made for the purposes of designating countries, the authorisations or processes of which may be recognised or taken into account, when the regulator is deciding licence conditions.
- 49 Subsection (5) imposes a requirement on the regulator to consult with various public bodies when deciding licence conditions.
- 50 There is a power in subsection (6) to prescribe how licensees are to comply with prescribed types of licence conditions and subsection (7) makes it an offence to breach licence conditions.

Clause 12: Licences granted for specified periods

- 51 This clause permits the regulator to grant a licence for a specific period of time.
- 52 Subsection (2) provides for the renewal of a licence for a further specified period.
- 53 Subsection (3) provides that if the regulator is not the Secretary of State, then the regulator must consult the Secretary of State before renewing a licence.
- 54 By subsection 4, the provisions of the Bill which apply to the grant of a licence also apply to the renewal of a licence as they do to the initial grant of a licence.

Clause 13: Transfer, variation, suspension or termination of licence

55 This clause provides for the transfer, variation, suspension or termination of a licence under this Bill.

Chapter 4: Exercise of functions by bodies other than Secretary of State

Clause 14: Power of Secretary of State to appoint person to exercise functions

- 56 This clause enables the Secretary of State to make regulations appointing the Civil Aviation Authority (CAA) or other persons ("appointed persons") to carry out functions of the regulator under this Act.
- 57 Subsection (7) states that CAA's general objectives as stated in section (4) of the Civil Aviation Act 1982 ("the 1982 Act") in relation to air transport services do not apply to functions it is appointed to under this Bill.
- 58 Subsection (8) clarifies that common law powers to arrange for other to exercise functions on the Secretary of State's behalf, are not displaced.

Chapter 5: Individuals taking part in spaceflight activities etc.

Clause 15: Informed Consent

- 59 Subsection (1) requires the holder of an operator licence not to allow individuals to take part in a prescribed role or capacity in spaceflight activities, unless prescribed requirements as to informed consent, age and mental capacity are met.
- 60 Subsection (2) requires that such consent must be executed by signing a consent form that

provides details of the risk assessment carried out by the licence holder under section 8.

61 Subsection (4) provides that it is an offence for the holder of an operator licence to fail to obtain written consent as set out in subsection (1).

Clause 16: Training, qualifications and medical fitness

- 62 This clause enables the making of "training regulations" prescribing training, qualifications and medical fitness standards for people taking part in, or otherwise engaged in connection with, spaceflight activities, providing range control services and working at spaceports and mission management facilities.
- 63 Subsections (2) and (3) prohibit the holder of a licence from permitting unqualified individuals to take part in, or otherwise be engaged in, specified roles or capacities and to work at specific sites.
- 64 Subsection (7) makes it an offence for a licence holder to contravene subsections (2) and (3).
- 65 Subsection (9) refers to Schedule 2. That Schedule provides a non-exhaustive list of examples of matters that may be covered in training regulations.

Chapter 6: Safety

Clause 17: Safety regulations

- 66 This clause provides for the making of "safety regulations" concerning the matters listed in subsection (1).
- 67 Subsection (2) refers to Schedule 3. That Schedule provides a non-exhaustive list of examples of matters that safety regulations may cover.

Clause 18: Investigation of Accidents

- 68 Subsection (1) provides for the making of regulations concerning the investigation of accidents arising out of spaceflight activities or activities licensed under the 1986 Act, whether occurring in the United Kingdom or elsewhere.
- 69 Subsection (2) provides a power that corresponds to that in subsection (3) of the 1982 Act. Subsection (2) does not limit the power in subsection (1). In addition, there is a power to make regulations to recover expenses connected with accident investigation.

Clause 19: Assistance etc. with performance of regulator's safety functions

- 70 Subsection (1) permits the regulator to request advice and assistance from a qualifying health and safety authority (as defined in subsection (2)); and to authorise a qualifying health and safety authority to carry out functions on the regulator's behalf.
- 71 Subsection (5) enables a qualifying health and safety authority to recover its costs from the regulator.
- 72 Subsection (6) enables the making of regulations to restrict the functions that this clause applies to.

Chapter 7: Security

Clause 20: Security regulations

- 73 This clause provides for the making of "security regulations" concerning the security of activities and facilities regulated under the Bill.
- 74 Subsection (2) provides that a non-exhaustive list of examples of matters that security regulations may cover are set out in Schedule 4.

75 Subsection (5) enables the Secretary of State to suspend a requirement in security regulations at military aerodromes where necessary for the operational requirements of the armed forces.

Clause 21: Power to grant exemption from security requirements

76 This clause enables the Regulator to grant exemptions by notice from the security requirements in clause 20(1) where the operator can demonstrate that adequate alternative security measures are in place. The Secretary of State's approval must be sought before issue of any such a notice, where the regulator is not the Secretary of State.

Clause 22: Spaceport byelaws

- 77 This clause enables a person authorised by a licence to operate a spaceport to make byelaws within that spaceport, for various security purposes.
- 78 Subsection (2) lists the types of matters that byelaws may address.
- 79 Subsections (3) and (4) relate to powers of spaceport officials and constables respectively.
- 80 Spaceport byelaws are subject to confirmation by the Secretary of State, by virtue of subsection (6). They can also be revoked or varied by the Secretary of State, pursuant to subsection (10).
- 81 Subsections (8) and (9) make provision for offences relating to contravention of spaceport byelaws.

Clause 23: Provision of advice and assistance on security matters

- 82 The clause enables a regulator to provide advice and information in response to a request from a holder of a licence (or an associated company) under this Bill.
- 83 Subsection (3) permits the Secretary of State to provide advice and assistance in connection with certain matters including directions given in the interests of national security.
- 84 Subsection (7) permits the regulator to recover its costs from the recipient of advice given under this clause.

Chapter 8: Enforcement

Clause 24: Monitoring and enforcement by regulator

- 85 This clause imposes monitoring and enforcement obligations on the regulator, for the purposes set out in subsection (2).
- 86 Subsection (3) contains regulation making powers to enable the regulator to exercise monitoring and enforcement functions.
- 87 Subsection (4) confers a power on the regulator to investigate and prosecute offences contained in or made under the Bill.

Clause 25: Power to give Directions: breach of licence conditions etc.

- 88 This clause enables the regulator to give directions to any person where it appears that person is carrying out spaceflight activities, operating a spaceport or providing range control services in contravention of any provision in the Bill, regulations made under it or licence conditions.
- 89 Such directions can be given for purposes relating to safety; securing compliance, or relating to the international obligations of the United Kingdom.

Clause 26: Power to give directions in the interests of safety, security etc.

90 Subsection (1) of this clause gives the regulator power to give directions to the holder of a

licence under the Bill in the interests of health or safety.

- 91 Subsections (2)-(4) give the Secretary of State power to give directions to the regulator or the holder of a licence under the Bill in the interests of health or safety, national security, or relations with another country.
- 92 Subsection (6) gives the Secretary of State power to give directions to the holder of a licence under the Bill in the interests of discharging the United Kingdom's international obligations.
- 93 Subsections (8) prohibits disclosure of a direction if notified by the Secretary of State, and subsection (9) makes prohibited disclosure an offence.
- 94 The rest of this clause is self-explanatory. Secretary of State may give those directions.

Clause 27: Further provisions about directions

- 95 This clause contains further provisions on giving directions under clauses 25 and 26, including requirements on consultation before making a direction.
- 96 Subsection (1) provides that the power to give directions under clauses 25 and 26 includes a power to stop activities and operations or dispose of objects or materials used in connection with spaceflight activities.
- 97 Subsection (7) provides that it is an offence to fail to comply with a direction.

Clause 28: Warrants authorising entry or direct action

- 98 This clause makes provision for the issuing and execution of enforcement warrants. A justice of the peace may authorise a named person to take action for the purposes set out in subsection (4).
- 99 Subsection (9) provides that it is an offence to intentionally obstruct a person exercising powers granted by an enforcement warrant.

Clause 29: Power to authorise entry in emergencies

- 100 Subsections (1) and (2) of this clause provide a power for the Secretary of State to authorise person acting on behalf of the regulator to do anything necessary where the conduct of persons involved in spaceflight activities gives rise to a serious risk to national security, a serious risk of a breach of the international obligations of the United Kingdom or a serious risk to health and safety of persons.
- 101 Subsection (3) provides that the Secretary of State may grant an enforcement authorisation to a person only if satisfied that they are suitably qualified to carry out the action authorised by it.
- 102 Subsections (4), (5) (6) and (7) provide for the format an enforcement authorisation should take, the powers it confers and its duration.
- 103 Subsection (8) provides that it is an offence to intentionally obstruct a person exercising powers granted by an enforcement authorisation.

Chapter 9: Liabilities, indemnities and insurance

Clause 30: Liability of Licensee for loss or damage etc.

104 Subsection (1) of this clause provides that there is no liability in trespass or nuisance in relation to spaceflight activities carried out substantially in compliance with all requirements and conditions imposed by or under this Bill.

- 105 Subsection (2) provides for the strict liability of an operator for injury or damage caused as a result of any craft or space object being used by the operator for spaceflight activities; by anything falling from such a craft or object, or by any person in the craft. This means that damages can be recovered without proof of negligence or intention or other cause of action.
- 106 Subsection (3) provides that this right to bring a strict liability claim does not apply to individuals of prescribed descriptions who are taking part in, or otherwise engaged in connection with spaceflight activities. It also does not apply to damage or injury that is caused or contributed to by the negligence of the person who sustains it.
- 107 Subsection (4) sets out circumstances in which the operator can be indemnified by another person for loss or damage for which the operator is strictly liable under subsection (2).
- 108 Subsection (5) provides that regulations may impose a cap on the liability of the holder of an operator licence in relation to damage or injury that arises out of spaceflight activities carried on by the licensee. This is subject to such matters as may be prescribed in accordance with paragraph (b).
- 109 In this clause, "injury or damage" means personal injury, death or physical damage (subsection (6)).

Clause 31: Power of Secretary of State to Indemnify

110 This clause gives the Secretary of State a power to indemnify in respect of loss or damage that results from spaceflight activities that are carried out by a licensed operator.

This power is subject to the conditions in subsection (1). The power is only available in the circumstances described in subsections (2) and (3) (b) in respect of an "excess" that exceeds a limit specified in the licensee's licence pursuant to the exercise of powers in subsection 30(5).

- 111 Subsection (4) enables the making of regulations that may limit or constrain the Secretary of State's discretion to make payments.
- 112 Subsection (5) provides for the making of regulations that enable the Secretary of State to participate in legal proceedings, or to direct the conduct of a case, where such proceedings may result in a liability in respect of which the power in this clause may be exercisable.

Clause 32: Obligation to Indemnify Government etc. against claims

- 113 This clause sets out obligations on persons carrying on spaceflight activities to indemnify the Government and other persons listed in subsection (2) against claims for loss or damage.
- 114 Subsection (3) makes this obligation to indemnify subject to a maximum liability specified in an operator licence under section 10(2) and to regulations made under section 3(5) which relate to exemptions from the requirement to hold an operator licence.
- 115 Subsection (4) sets out the circumstances where the obligation to indemnify under this clause will not apply.

Clause 33: Regulator etc. not liable for exercise of functions

- 116 This clause provides protection from liability for the regulator and other persons listed in subsection (2), who take or fail to take "relevant actions", as defined in subsection (3).
- 117 This protection does not apply in the case of wilful misconduct (subsection (4)).

Clause 34: Insurance

118 This clause enables regulations to prescribe insurance requirements for licence holders and other persons engaged in spaceflight activities.

- 119 Subsection (2) provides a power for the Secretary of State to make arrangements with any person to enable any person to comply with the insurance requirements prescribed in regulations or in licence conditions. These arrangements may include the provision of insurance or reinsurance, an indemnity or guarantee, or the making of grants.
- 120 Subsections (4), (5) and (6) comply with the Parliamentary convention that the destination of any public funds must be set out. These provisions are not to be read as implying that the funds received or paid out pursuant to arrangements enabled by subsections (2) and (3) will inevitably be paid to or by the Secretary of State. The powers to make insurance and reinsurance arrangements could enable payments to or by a separate legal person providing insurance or reinsurance.
- 121 Under subsection (8) a reference to insurance includes a reference to a type of security that satisfies conditions that may be set out in secondary legislation. The terms "insured" and "reinsurance" should be read accordingly.

Chapter 10: Powers in relation to land: acquisition of land etc.

Clause 35: Powers to obtain rights over land

- 122 The clause enables the Secretary of State to make an order creating rights over land in favour of the Secretary of State, a range controller, or the holder of a spaceport licence. An order may be made for the purposes set out in subsection (1).
- 123 The person granted the right must give notice to the occupier if it is necessary to enter the land. Compensation is payable if the value of the land in question is diminished in consequence of the exercise of power.

Clause 36: Orders under section 35: offences

124 This clause makes it an offence to interfere with any works carried out, or with anything installed on, under, over or across any land whilst an order under clause 35 is in force.

Clause 37: Power to restrict use of land for purpose of securing safety at spaceports

- 125 This clause enables the Secretary of State to impose by order prohibitions or restrictions on the use of any area of land or water to ensure that spacecraft or carrier aircraft may be safely launched or landed, and to prevent the endangerment of persons or property. For example, this may be imposed to ensure that the use of land is restricted in certain periods, which may include advising people not to enter a given area of land for the duration of a launch window. Compensation is payable if the value of the land in question is diminished in consequence of the operation of the order.
- 126 Subsection (14) makes contravening an order an offence.

Clause 38: Power to exercise control over land in interests of spaceflight activities

- 127 This clause enables the Secretary of State to make an order over land which permits the Secretary of State to give directions regarding that land. Subsections (5) and (6) set out what directions may include.
- 128 Subsection (3) sets out the purposes for which an order may be made.
- 129 Subsection (9) makes it an offence to fail to comply with a direction under this clause.

Clause 39: Orders under section 38: consequential amendments of local Acts

130 This clause enables the making of regulations to repeal or amend local enactments which are unnecessary or inconsistent with an order made under clause 38. Subsection (2) requires consultation with any local authority that is likely to be affected by the proposed regulations.

Clause 40: Power of entry for purposes of survey

- 131 This clause enables the Secretary of State to authorise a person to enter land to make a survey in connection with an order under clause 35.
- 132 Subsection (5) makes it an offence to obstruct an authorised person.

Clause 41: Entry to land for survey: compensation

133 This clause provides for the payment of compensation where damage is caused to land in exercise of powers under section 40 to enter land or in the making of any survey in connection with those powers.

Clause 42: Registration of orders under sections 35 and 37

134 This clause provides for the registration of any orders made under clauses 35 and 37.

Chapter 11: Powers in relation to land: supplementary

Clause 43: Special provisions relating to statutory undertakers

135 This clause and associated Schedule 7 makes provision about compensation to statutory undertakers, and for the adjustment of their functions as may be necessary.

Clause 44: Displacements from land

136 Where executing a direction under an order under section 38 will displace persons, this clause imposes a duty on the beneficiary of the order to make available residential accommodation to those who require it.

Clause 45: Compensation in respect of planning decisions relating to spaceport safety

etc.: England and Wales and Scotland

- 137 This clause allows local planning authorities to recover money from a spaceport operator or range controller if the planning authority has had to pay compensation for certain reasons. Those reasons are set out in subsections (1) and (3).
- 138 Subsection (8) sets out that any dispute will be referred to the Secretary of State for determination.

Clause 46: Compensation in respect of planning decisions relating to spaceport safety

etc.: Northern Ireland

139 This clause allows a district council in Northern Ireland to recover money from a spaceport operator or range controller if that council has had to pay compensation because of a planning decision that would not have been taken but for the need to secure the safe and efficient operation of a spaceport, or of range control apparatus.

Clause 47: Powers in relation to land: notices

140 This clause applies section 56 of the Civil Aviation Act 1982 to notices under the provisions of the Bill listed in subsection (2). Section 56 of the Civil Aviation Act 1982 sets out provision for how and on whom notices are to be served.

Chapter 12: Offences and Civil Sanctions

Clause 48: Application of criminal law to spacecraft

141 This clause relates to acts or omissions taking place on spacecraft that has been launched from the United Kingdom. Such acts or omissions, if constituting an offence in the United Kingdom, will also constitute an offence on board the spacecraft when the spacecraft is outside the United

Kingdom (subsection (1)).

- 142 However, no offence would occur if any act or omission is expressly or impliedly authorised under the law of the United Kingdom (subsection (2)).
- 143 Subsection (4) provides that proceedings for offences committed on board a United Kingdom launched spacecraft (except for offences created by this Bill or regulations made under it) may only be initiated by or with the consent of the Director of Public Prosecutions (in England or Wales) or the Attorney General for Northern Ireland (in Northern Ireland). There is no provision made in this subsection in respect of Scotland, because the procurator fiscal in Scotland both institutes criminal proceedings and as master of the instance has discretion as to who should be prosecuted.
- 144 This clause makes provisions corresponding to that in section 92 of the 1982 Act for offences committed on aircraft.

Clause 49: Offences on board spacecraft: supplementary

- 145 This clause allows regulations to be made relating to offences that occur on board a spacecraft.
- 146 The regulations can only be made in relation to the listed provisions set out in subsection (2) and the power to make regulations is subject to the matters set out in subsections (3) and (4).

Clause 50: Penalties for offences under the Act

147 This clause sets out the penalties that a person would be subject to if they commit an offence under the Bill.

Clause 51: Offences under regulations

148 This clause enables the Secretary of State to make regulations creating offences under this Bill and sets out the associated penalties.

Clause 52: Offences under regulations: extended time limit in case of accident

investigation etc.

- 149 This clause provides for an extended time limit of 12 months for summary proceedings to be brought for the commission of an offence, in the circumstances specified in paragraphs (a) and (b). These are that there has been an accident and not more than six months after the commission of the offence, either a public notice or direction has been given, that an accident investigation or public inquiry (respectively) is to take place.
- 150 This does not affect the time limit for offences triable either way (subsection (3)).

Clause 53: Defences

- 151 This clause provides for defences relating to offences under the Bill where a person has exercised all due diligence and took all reasonable precautions to avoid committing an offence.
- 152 Subsection (3) sets out the sections where a defence does not apply.
- 153 Subsection (4) enables regulations that create offences to provide for defences in relation to those offences.

Clause 54: Offences by bodies corporate and partnerships

154 This clause sets out the position where an offence has been committed by an officer of body corporate and by a partnership. The clause also provides for the rules of court relating to the service of documents.

Clause 55: Civil sanctions

- 155 This clause enables regulations providing for civil sanctions to be made in respect of criminal offences created by the Bill, or by regulations made under it. This power corresponds to that in Part 3 of the Regulatory Enforcement and Sanctions Act 2008 (c.13) ("RESA").
- 156 Part 3 of RESA allows Ministers to make regulations to provide for alternative civil sanctioning powers for relevant criminal offences that relate to regulatory non-compliance. The civil sanctions available under RESA are: fixed monetary penalties, discretionary requirements, stop notices and enforcement undertakings. They are an alternative to, rather than a replacement for, criminal conviction especially for minor breaches of regulatory requirements. They allow for a more tailored approach to be taken to enforcement.
- 157 Regulations making this kind of provision must be made under the affirmative procedure.

Chapter 13: Appeals

Clause 56: Appeals

158 This clause provides that Schedule 8 makes provision for appeals against decisions made under this Bill and under the 1986 Act. In particular, paragraph (b) provides for the establishment of an Appeals Panel.

Chapter 14: Miscellaneous

Clause 57: Charging schemes

159 This clause makes provision for charging schemes in respect of charges for carrying out functions under this Bill and the provision of services under this Bill, with details set out in Schedule 9.

Clause 58: Provision of advice and assistance by or to an appointed person

160 This clause enables the Secretary of State to obtain advice and assistance from a person appointed under section 14 and entitles this person to recover its costs of doing so. The clause also gives the Secretary of State a power to provide advice and assistance to an appointed person on request and to recover the reasonable expenses of providing the advice and assistance.

Clause 59: Co-operation between Secretary of State and other bodies

161 This clause allows the Secretary of State and public bodies to enter into arrangements and exchange information. The list of bodies under subsection (2) paragraphs (a) to (f) is not exclusive, by virtue of paragraph (g). These arrangements must be reviewed periodically and revised as appropriate.

Clause 60: Agreements with other countries: compliance with safety requirements

etc.

162 Subsection (1) confers a power to make regulations to prescribe circumstances and conditions under which compliance with prescribed requirements or prohibitions imposed under the terms of an agreement with another country is to be taken as compliance with prescribed requirements or prohibitions in subordinate legislation.

Clause 61: Use of records and documentary evidence

163 This clause provides for the use of documents and records as evidence in legal proceedings. Under subsection (5), a person who certifies a document or record knowing that it is not a true copy commits an offence.

Chapter 15: General

Clause 62: Minor and consequential amendments

- 164 This clause gives effect to the minor and consequential amendments contained in Schedule 10.
- 165 Subsection (2) enables the Secretary of State to make other minor and consequential amendments by regulation.
- 166 Where such regulations amend secondary legislation, then the negative resolution procedure applies. However, any amendments by regulation to primary legislation will require the use of the affirmative resolution procedure.

Clause 63: Regulations: General

- 167 This clause enables the Secretary of State to make regulations on any matters to be prescribed under this Bill or for putting this Bill into effect.
- 168 Subsection (4) provides that regulations under this Bill can be made using the negative resolution procedure, except where subsections (5) and (7) apply.
- 169 Subsection (5) requires the affirmative resolution procedure for regulations made under sections 31(4) (limits or restrictions in respect of the Secretary of State's power to indemnify); section 32(2) (a) (limits or restrictions on obligation to indemnify Government etc. against claims); section 55 (regulations providing for civil sanctions); and section 60 (agreements with other countries meeting compliance with requirements) are subject to the affirmative resolution procedure.
- 170 Subsection (6) enables provision under this Bill that may be included in regulations to also be included in an Air Navigation Order. Where an Air Navigation Order is made the affirmative resolution procedure will be required if any of the powers in subsection (5) are relied upon.

Clause 64: Interpretation

- 171 This clause defines various terms used in this Bill.
- 172 Subsection (6) makes it clear that the fact that a spaceport licence is in force in respect of any site does not affect the question of whether that site is or forms part of an "aerodrome", as that term is defined in section 105(1) of the 1982 Act.

Clause 65: Commencement

173 This clause enables the Secretary of State to bring into force by regulation the provisions in this Bill, except sections 63 to 67 – which automatically come into force the day on the day of the Bill is passed.

Clause 66: Extent

- 174 This clause provides that this Bill extends to the whole of the United Kingdom, although some provisions do not extend to Northern Ireland, as provided for in subsection (2).
- 175 Subsection (3) enables an Order in Council to extend of any of the provisions of this Bill; with modifications, to any of the Channel Islands, the Isle of Man and any British overseas territory.

Clause 67: Short title

176 This clause is self-explanatory

Chapter 16: Schedules

Schedule 1: Particular conditions that may be included in operator licences

177 This Schedule lists conditions and types of conditions that may be included in a licence issued under this Bill.

Schedule 2: Training Regulations: further Provision

178 This Schedule provides examples of provisions that may be made by training regulations under clause 16.

Schedule 3: Safety Regulations: further provision

179 This Schedule provides examples of the provisions that may be made by safety regulations under clause 17.

Schedule 4: Security Regulations: further provision

180 This Schedule provides examples of the provisions that may be made through security regulations under clause 20.

Schedule 5: Orders under section 35 and 37

- 181 This schedule sets out the procedures for making orders under section 35 and section 37.
- 182 It includes requirements for serving and publishing notice of a proposed order and sets out procedures for dealing with objections to the order.
- 183 It also sets requirements for serving and publishing notice when an order has been made provides for appeals against the order, and provides for payment of compensation if the value of land has been diminished.

Schedule 6: Provisions relating to orders and directions under Section 38

- 184 This schedule sets out further provision for making an order under clause 38 and for directions under such an order. It sets requirements for serving and publishing notice of any direction made, provides for appeals against directions, and provides for payment of compensation if the value of land has been diminished as a result of the direction.
- 185 Orders under clause 38 are subject to special parliamentary procedure. The special procedure order is laid before parliament and objectors have 21 days to deposit petitions against the order or deposit amendments.
- 186 Statutory undertakers are unable to recover compensation under this Schedule if they are entitled to recover compensation under Schedule 7.

Schedule 7: Powers in Relation to Land: Special Provisions relating to Statutory

Undertakers

- 187 Part 1 of the Schedule makes further provision about the assessment and amount of compensation payable to a statutory undertaker affected by a right created under an order under clause 35 or clause 37.
- 188 Part 2 relates to orders or directions made under clauses 35, 37 or 38 which affect a statutory undertaking.
- 189 Paragraph 4 enables the Secretary of State to make an order (on the request of a person carrying out a statutory undertaking) extending or modifying the powers of the statutory undertaker, including giving the statutory undertaker power to acquire land or build things.
- 190 Paragraph 5 allows the Secretary of State to make an order relieving a statutory undertaker from an obligation if fulfilling the obligation is impracticable.
- 191 Paragraphs 6 and 7 set out notice requirements and what happens if there is an objection to a proposed order to modify the functions of a statutory undertaker.
- 192 Paragraph 8 provides that some orders under this schedule are subject to special

parliamentary procedure. The special procedure order is laid before parliament and objectors have 21 days to deposit petitions against the order or deposit amendments.

Schedule 8: Appeals in connection with space activities

- 193 This Schedule contains provisions regarding appeals in relation to certain decisions made under the Bill and the 1986 Act.
- 194 Part 1 of this Schedule provides that the Secretary of State must, by way of regulations, establish a panel to consider appeals (paragraph 1). These regulations may make provision about the composition of such a panel, the terms of appointment and remuneration amongst other things set out within this part (paragraph 3).
- 195 Part 2 sets out the decisions against which an appeal can be brought and by whom.
- 196 Part 3 provides for the determination of appeals. Paragraph 5 provides that appeals may only be brought with the permission of the Panel and as such, this part sets out the circumstances in which the Panel may not accept an application for permission to appeal (paragraph 6) and the grounds on which the Panel can refuse an application for permission to appeal (paragraph 7). This Part also sets out the circumstances in which an appeal may be allowed and that regulations may make provisions relating to the determination of an appeal (paragraphs 8, 9, 10 and 11).
- 197 Part 4 contains provisions relating to the procedure to be followed when an appeal has been made including representations in relation to an application for permission to appeal (paragraph 12), intervention in an appeal (paragraph 13 and 14) and provision for the making of procedural regulations in relation to appeals (paragraph 15).
- 198 Part 5 provides that the Secretary of State by way of regulations may prescribe fees in respect of anything dealt with by the Panel under the Schedule. Any prescribed fee must be reasonable and proportionate to the costs to which it relates.

Schedule 9: Charging schemes

- 199 Paragraph 1 provides that a charging authority means the Secretary of State or the regulator (if this is not the Secretary of State) and sets out the power of the charging authority to make a charging scheme to charge for its performance of relevant functions.
- 200 The charging authority must charge according to the charging scheme where there is a scheme in place (subparagraph (3)) but it may waive all or part of a charge if it thinks fit (. subparagraph (4)). Subparagraphs (5) and (6) are self-explanatory.
- 201 Paragraph 2 sets out what may be included in charging schemes (subsections 1 and 2) and the scheme may specify the manner, time and by whom the charge is to be paid (subsection (4)). Subsection (5) provides that a charging scheme may specify different charges for different cases.
- 202 Paragraph 3 sets out the obligations that a charging authority has in relation to consulting before making a charging scheme.
- 203 Paragraph 4 provides that a charging scheme has effect only from the date specified in regulations setting out the scheme.
- 204 Paragraph 5 provides that if a licence condition requires payment of charges determined under a scheme, this does not prevent the charging authority recovering those charges as a debt due to it.

Schedule 10: Minor and Consequential amendments

205 This Schedule contains minor and consequential amendments to the Civil Aviation Act 1982, Aviation Security Act 1982, Airports Act 1986, Outer Space Act 1986, Aviation and Maritime Security Act1990, Transport Act 200 and Energy Act 2013.

Commencement

206 Clause 65 provides for commencement of the provisions in the Bill. With the exception of sections 63 to 67, the provisions of the Bill come into force on the days appointed by the Secretary of State by regulations. Clauses 63 to 67 will come into force on the day on which the Bill is passed.

Financial implications of the Bill

207 Full details of the financial implications of the Bill are set out in the Impact Assessment. The net present value of the measures contained in the Bill is non-quantifiable. The Impact Assessment for the Bill can be found at the link below.

Compatibility with the European Convention on Human Rights

208 The Government considers that the Spaceflight Bill is compatible with the European Convention on Human Rights ("ECHR"). Accordingly, the Right Honorable Chris Grayling MP, Secretary of State for Transport, has made a statement under section 19(1) (a) of the Human Rights Act 1998 to this effect. Further explanation of key human rights issues will be provided in the next iteration of this document. References to articles are to articles of the ECHR.

Related documents

209 The following documents are relevant to the Bill and can be read at the stated locations:

Annex A - Territorial extent and application in the United Kingdom

The provisions of the Bill extend and apply to England and Wales, Scotland and Northern Ireland.²

Provision	Extends to E & W and applies to England?	Extends to E & W and applies to Wales?	Extends and applies to Scotland?	Extends and applies to Northern Ireland?	Would corresponding provision be within the competence of the National Assembly for Wales?	Would corresponding provision be within the competence of the Scottish Parliament?	Would corresponding provision be within the competence of the Northern Ireland Assembly?	Legislative Consent Motion needed?
Clauses 1- 66	Yes	Yes	Yes	Yes, except as provided for in clause 66(2).	N/A	N/A	N/A	No
Schedules 1-10	Yes	Yes	Yes	Yes	N/A	N/A	N/A	No

² References in this Annex to a provision being within the legislative competence of the Scottish Parliament, the National Assembly for Wales or the Northern Ireland Assembly are to the provision being within the legislative competence of the relevant devolved legislature for the purposes of Standing Order No. 83J of the Standing Orders of the House of Commons relating to Public Business.

SPACEFLIGHT BILL EXPLANATORY NOTES

These Explanatory Notes relate to the Spaceflight Bill as published in Draft on 21 February 2017 (Bill Cm9421).

Ordered by the Department to be printed, 21 February 2017

© Parliamentary copyright 2017

This publication may be reproduced under the terms of the Open Parliament Licence which is published at www.parliament.uk/site-information/copyright

PUBLISHED BY AUTHORITY OF THE DEPARTMENT