

EXPLANATORY NOTES

Space Industry Act 2018

Chapter 5

SPACE INDUSTRY ACT 2018

EXPLANATORY NOTES

What these notes do

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

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Overview of the Act

- 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 OSA"), 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 OSA was enacted primarily to implement United Kingdom obligations under the UN Space Treaties.¹ Activities licensed under OSA have, to date, involved the licensing of small satellites launched overseas and the operation of satellites.
- 2 This Act provides for the creation of a regulatory framework to enable commercial spaceflight activities (involving 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 Act 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 Act 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 Act.
- 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 Act.
- 7 The OSA will remain in force, but will be amended so that it will only cover space activities overseas. A number of the provisions in this Act mirror those found in OSA, as this Act implements 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. As such, the Act provides a framework for the development of more detailed rules in secondary legislation, supplemented by guidance. In addition, spaceflight activities will be carried out in accordance with licences, which may contain a wide range of conditions.

Consultation

- 9 Since 2013, a cross-Government programme of work has been pursued encompassing three broad strands:
 - Understanding from a regulatory perspective what needs to be put in place to enable safe commercial spaceflight in the United Kingdom.

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

- Identifying potential locations from which commercial spaceflight operations could 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 A key milestone in this work was the publication of the 2014 UK Government Review of Commercial Spaceplane Certification and Operations ("the Spaceplane Review").² Subsequently, between 15 July and 6 October 2014, the Government consulted³ on key operational, safety, meteorological, environmental and economic criteria which the Civil Aviation Authority and United Kingdom Space Agency had identified, to be taken into consideration when considering applications for spaceports in the UK.
- 11 The Spaceplane Review and subsequent Government consultation focused primarily on enabling the United Kingdom to become an early adopter of emerging horizontally launched sub-orbital "spaceplane"⁴ technologies. Some respondents advocated the development of a vertical launch capability. The scope of this Act covers both horizontal and vertical launch technologies.
- 12 As a part of the preparation of the Act, an industry stakeholder workshop was held on 6 September 2016. The objectives of the workshop were to:
 - · test current assumptions regarding policy development;
 - identify and understand stakeholder concerns in relation to United Kingdom launch;
 - identify potential gaps and 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; and
 - assist the development of policy for the Act.
- 13 The stakeholder workshop supported the Government's approach to the development of the Act.⁵
- On 21 February 2017, a draft Spaceflight Bill was published for pre-legislative consultation. On 2 March, the Science and Technology Committee launched an Inquiry to examine the Bill and heard evidence from industry and Government over two sessions on 27 March and 19 April. In addition, they received a submission on the Bill from the Delegated Powers and Regulatory Reform Committee. Their report was published on 29 April 2017 and the Government responded to this report on 22 June 2017. The Space Industry Act is based on this earlier draft Bill. On 8 September 2017 the House of Lords Select Committee on the

²https://www.gov.uk/government/publications/commercial-spaceplane-certification-and-operations-uk-government-review

³https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/329756/spaceplanes-summary.pdf https://www.gov.uk/government/consultations/spaceport-locations-and-criteria

⁴ This term is used for vehicles that have at least some of the characteristics of an aircraft, whilst also having the capability to operate above the stratosphere.

⁵ https://www.gov.uk/government/publications/discussion-summary-satellite-launch-stakeholder-workshop

Legal background

- 15 The subject matter of this Act potentially engages issues of international outer space law and air law.
- 16 International rules concerning activities in outer space are governed by the UN Space Treaties.⁶ The United Kingdom has signed and ratified the following four out of five⁷ UN Space Treaties:
 - Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space including the Moon Treaty and other Celestial Bodies ("the Space Treaty");
 - Agreement on the Rescue of Astronauts, the Return of Astronauts and the Return of Objects launched in Outer Space ("the Rescue Agreement");
 - Convention on International Liability for Damage caused by Space Objects ("the Liability Convention"); and
 - Convention on Registration of Objects Launched into Outer Space ("the Registration Convention").

These Treaties are implemented in the United Kingdom by the OSA.

- 17 The UN Space Treaties provide a high level framework, covering such matters as registration of space objects and liabilities for damage caused by such objects. However, no detailed international or EU rules have been developed to govern matters such as the safety and security of the craft and facilities that engage in space activities.
- 18 The UN Space Treaties do not define where outer space begins, but article II of the Liability Convention requires registration of a space object launched into the Earth's orbit or beyond. This Act regulates both "space activities" governed by the Space Treaties; and "suborbital activities" (together "spaceflight activities"). The definitions of these terms in section 1 are explained further in the notes to this section below.
- 19 Some of the craft that might be used in either a space activity or a suborbital activity may have at least some characteristics of an aircraft.⁸ The key treaty governing civil aviation is the Convention on International Civil Aviation 1944 ("Chicago Convention"), which applies to aircraft engaged in international air navigation and to international air transport. The International Civil Aviation Authority ("ICAO"), responsible for oversight of the Chicago Convention, has not reached a definitive position as to whether craft involved in suborbital or space activities are subject to air law. It has recognised that current ICAO Annexes to the Chicago Convention are not suitable to meet the technical requirements of operations

⁶ <u>http://www.unoosa.org/oosa/en/ourwork/spacelaw/treaties.html</u>

⁷ Note: The fifth space treaty is the Agreement Governing the Activities of States on the Moon and other Celestial Bodies ("the Moon Agreement"). The UK, along with all other major space-faring nations, has not ratified the Moon Agreement.

⁸ Chapter 1 of Annex 7 to the Chicago Convention on International Civil Aviation 1944 ("Chicago Convention") – "Aircraft Nationality and Registration Marks" defines such a vehicle as "Any machine that can derive support in the atmosphere from the reactions of the air other than the reactions of the air against the earth's surface."

involving such vehicles.9

- 20 The European Aviation Safety Agency was established by Regulation (EC) no 1592/2002¹⁰, now repealed and replaced by (EC) No 216/2008 ("the EASA Basic Regulation") to oversee a comprehensive set of common safety rules for civil aviation in the EU.¹¹
- 21 The EASA Basic Regulation exempts "aircraft specifically designed or modified for research, experimental or scientific purposes, and likely to be produced in very limited numbers" (Article 4(4) and Annex II (b)). Were any relevant craft used in spaceflight activities to come within scope of the EASA Basic Regulation, these would currently fall within this exempt category. EASA and the EU have not developed any detailed regulatory rules for suborbital activity, nor indeed for any other form of spaceflight activity, as yet.
- 22 This Act has been developed against this backdrop. While it enables the UK to develop detailed regulatory rules even before such rules are developed at the international level, it also enables compliance with international and EU rules insofar as they may currently be understood to apply.

Territorial extent and application

- 23 The Act extends to the whole of the United Kingdom, except for certain provisions not extending to Northern Ireland.
- 24 Section 71 allows provisions of this Act to be extended, with modifications, to the Channel Islands, the Isle of Man and any British overseas territory, by way of an Order in Council.
- 25 The application of the provisions is as described in individual sections. 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 Act in the United Kingdom.

Commentary on provisions of the Act

Regulation of spaceflight etc

Section 1: Introduction

26 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 activities involving spaceports, mission control centres, range control services and training. The Act applies to and will regulate such activities carried out in the UK, the term "carries out" being defined in subsection (2).

These Explanatory Notes relate to the Space Industry Act 2018 (c.5) which received Royal Assent on 15 March 2018

⁹ ICAO's view on commercial spaceflight can be found here: http://www.icao.int/Meetings/SPACE2016/Presentations/1a%20-%20PRES%20Dr.Aliu%20-%20Welcome%20Remarks%20-%20ICAO.pdf; http://www.icao.int/Meetings/LC36/Working%20Papers/LC%2036%20-%20WP%203-2.en.pdf.

 $^{^{10}}$ Regulation (EC) no 1592/2002 of the European Parliament and of the Council of 15 July 2002 on common rules in the field of civil aviation and establishing a European Aviation Safety Agency

Regulation (EC) No 216/2008 of the European Parliament and of the Council of 20 February 2008 on common rules in the field of civil aviation and establishing a European Aviation Safety Agency, and repealing Council Directive 91/670/EEC, Regulation (EC) no 1592/2002 and Directive 2004/36/EC ("the EASA Basic Regulation").

- 27 Subsection (3) makes an amendment to the OSA so that activities carried out in the UK will cease to be regulated by that Act.
- 28 The definitions of space activity and sub-orbital activity are set out within subsection (4). The definitions ensure that all types of sub-orbital and space activities are captured including both ground and air launch, as well as in-orbit activities. There will be diverse categories of activity and technologies captured by these definitions. Secondary legislation will differentiate the regulatory requirements according to what is appropriate and proportionate.
- 29 The defined term "space activity" in subsection (4) mirrors the class of activities to which OSA applies as set out in section 1 of that Act. This is the same class of activities that is governed by the Space Treaties and so the definition of "space activity" incorporates the term "space object". The term "space object" in subsection (4) has the meaning given in section 13(1) OSA (section 69(1)). This states that a "space object" "includes the component parts of a space object, its launch vehicle and the component parts of that." This meaning is based on the definition contained in article 1 of the Liability Convention. A space object could therefore be a satellite or the spacecraft itself.
- 30 The subsection (4) definition of "space activity" includes "any activity in outer space." "Outer space" has the same meaning as in section 13(1) OSA (Section 69), which states that "outer space" "includes the moon and other celestial bodies". This again follows wording used in the Space Treaty.¹³
- 31 Subsection (5) defines a sub-orbital craft as being one that is capable of reaching the stratosphere.
- 32 Taking these definitions together, both space activities and suborbital activities involve craft that are capable of operating above the stratosphere. The delineation between the two depends on whether an activity would be a "space activity" or not. The UN Space Treaties do not define or demarcate where outer space begins, but article II of the Liability Convention does require registration of a space object launched into the Earth's orbit or beyond. Therefore, where the launch activity involves a space object that is intended to go into outer space and is capable of achieving an orbit of the Earth, this is a space activity. Operating a space object in outer space is also a space activity, as is any other activity in outer space.
- 33 "Spaceflight activities" is a generic term that is used in the Act for both of these types of activities (subsection 6), since many of the provisions in the Act are common to both.

Section 2: Duties and supplementary powers of the regulator

- 34 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 its functions under the Act.
- 35 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 (h).
- 36 Paragraph (g) refers to any international obligations of the United Kingdom. These obligations are not limited to those in the UN Space Treaties, but include any obligation arising as a matter of international law. Paragraph (h) refers to any space debris mitigation guidelines

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¹² Convention on International Liability for Damage Caused by Space Objects "the Liability Convention" (1971).

¹³ Treaty on the Principles Governing the Activities of States in the Exploration and Use of Outer space, including the Moon and Other Celestial Bodies ("the Outer Space Treaty") (1966) – article 1.

- issued by an international organisation in which the government of the United Kingdom is represented. This is intended to capture the guidelines issued by the Inter-Agency Debris Co-ordination Committee of which the UK is a member.
- 37 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.
- 38 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 this or other legislation.
- 39 Subsection (6) provides various definitions. A "spacecraft" is either a space object or a craft that is capable of being used for sub-orbital activities, as the latter are defined in section 1(5). The definition of a spacecraft does not require such a craft to have any particular technological or design feature to achieve propulsion.
- 40 By contrast, a carrier aircraft is defined to be an aircraft¹⁴ that is not capable of operating above the stratosphere and is used to carry a spacecraft. The definition does not mean that a craft that is capable of operating above the stratosphere (but not a space object) cannot be an aircraft.
- 41 Subsection (7) enables regulations to prescribe the meaning of "members of the public" for the purposes of provisions of the Act relating to public safety.

Section 3: Prohibition of unlicensed spaceflight etc

- 42 This provision in subsection (1) prohibits the carrying out of space and sub-orbital activities and operation of a spaceport in the United Kingdom without a licence. The terms and conditions applicable to licences are dealt with in sections 12 and 13. The regulator will have a degree of flexibility, so could, for instance, issue an operator licence for a specific activity or a class of activities. A licence will be issued to a legal person, so any person carrying out an activity that falls within scope of a section 1(1) regulated activity will require a licence. The Act does not preclude a single licence being issued to more than one person on the basis of joint and several liability for all activities covered by that licence.
- 43 Different parties may also have different levels of control over a regulated activity. For instance, where there is the launch of a satellite to orbit – both the operator of the spacecraft that is carrying the satellite (i.e. the operator of the launch vehicle) and the operator of the satellite (i.e. the person who has direct and effective control of the satellite when it is in orbit) will need to be licensed for space activities. The satellite operator will be engaging in the space activity of "procuring the launch" (section 1(4)(a)) and operating a satellite (section 1(4)(b)). The licence will therefore need to cover both types of activity (see section 12(1) – which permits this). In this example, the conditions in respect of section (1)(4)(a) activities will be less onerous than if the satellite operator was itself the launch vehicle operator.
- 44 Subsection (2) provides definitions of an "operator licence" and a "spaceport licence" and also sets out the meaning of the term "spaceport". This provision is self-explanatory. Subsection (3) is also self-explanatory and excludes temporary installations at sea from the definition of a spaceport.

¹⁴ Chapter 1 of Annex 7 of the Convention on Civil Aviation 1944 (known as the "Chicago Convention") defines an "aircraft" as follows: "Any machine that can derive support in the atmosphere from the reactions of the air other than the reactions of the air against the Earth's surface."

- 45 Subsection (4) provides that an operator licence is not required by a licensed operator's employees or agents.
- 46 Subsection (5) 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 section means the holder of an operator licence or the holder of a spaceport licence.
- 47 Subsection (6) makes it an offence for a person to engage in spaceflight activities or to operate a spaceport without a licence. Subsection (7) 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 (6) and (7) correspond to section 12(1)(a) and (b) of OSA, which contain equivalent offences in relation to activities carried on outside of the United Kingdom by United Kingdom nationals and companies.

Section 4: Exemptions from licence requirements

- 48 Section 3 prohibits the carrying out of space and sub-orbital activities in the United Kingdom without a licence. However, there are exemptions from the requirement to hold an operator licence as set out in section 4.
- 49 Section 4, subsection (1) provides 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 to be required to be certified by an Order in Council, issued by and with the advice of the Privy Council and approved by Her Majesty the Queen.
- 50 Subsection (2) enables regulations to exempt other persons or activities from requiring an operator licence (such exemptions applying either by the regulations themselves or by the regulator) where the Secretary of State is satisfied that a licence is not required in order to secure public safety, the health and safety of individuals taking part in spaceflight activities in a role or capacity prescribed under section 17(1); and compliance with the international obligations of the United Kingdom. Public safety means the health and safety of members of the public and the safety of their property (section 2(6)). Regulations may also prescribe the meaning of "members of the public" for the purposes of this Act (section 2(7)).
- 51 Subsection (3) provides that exemptions may be granted for a limited period.
- 52 Subsection (4) enables regulations to be made concerning matters relating to exemptions.

Range control

Section 5: Range

53 Subsection (1) of this section defines the term "range" in relation to spaceflight activities. This is a zone, consisting of a volume of airspace or an area of land or sea, where warnings, 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. A range may cover a very large distance, over which a range control service provider does not have direct control or power to exclude uninvolved parties. Segments of a range will be activated from time to time. This activation will not rely exclusively on matters provided for in the Act, but will involve an interface with other legislation and international procedures.

- 54 Subsection (2) enables regulations to be made concerning the range or ranges for spaceflight activities. Such regulations may include, but are not limited to: matters to be taken into account in identifying the appropriate range; requirements on persons for the operation of the range; and requirements on the person providing the range control services concerning notification of others.
- 55 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 includes a power for the Secretary of State to give the CAA directions concerning range for spaceflight activities. 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".

Section 6: Range control services

- 56 Subsection (1) lists those activities that constitute range control services.
- 57 Paragraph (d) of subsection (1) concerns notifications. While the precise requirements for notifications will be left to regulations, the role of the range control service provider may be, where appropriate, to alert competent authorities or other persons, who will in turn notify land, sea or airspace users of dangerous activities. For instance, there are established domestic and international procedures for the Maritime and Coastguard Agency to issue notices to mariners;¹⁵ and for the CAA to issue notices to airspace users.¹⁶ Any restrictions or exclusions will only apply in the UK (including territorial waters), to the extent enabled in the Act particularly pursuant to powers in section 41.
- Paragraph (g) of subsection (1) 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.
- 59 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).

Section 7: Provision of range control services

- 60 Subsection (1) provides that only the Secretary of State or a person authorised by a range control licence may provide the range control services that are listed in section 6(1) or are prescribed in regulations made under section 6(1)(g).
- 61 Subsection (2) defines the terms "range control licence" and "range control service provider".
- 62 Subsection (3) exempts employees and agents of a licensed range control service provider from also being required to hold a range control licence.
- 63 Subsection (4) enables regulations to grant exemptions (or to allow the regulator to grant exemptions) from the requirement to hold a licence for provision of range control services. As

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Advisory warnings would be by a Notice to Mariners, radio navigational Coastal Warning (WZ) via UK Hydrographic Organisation https://www.admiralty.co.uk/maritime-safety-information/radio-navigational-warnings. The Notice to Mariners forms part of the Worldwide Navigational Warning Service which is itself carried as a component of the Global Maritime Distress and Safety System (GMDSS). The International Convention for the Safety of Life at Sea (SOLAS) 1974 requires ships to carry radios and / or other communications devices that receive the GMDSS.

¹⁶ The UK is required to provide an aeronautical information service under Annex 15 to the Chicago Convention. 1944. The CAA is obliged to publish the Aeronautical Information Programme and Notices to Airmen (NOTAMs) under directions from the Secretary of State under section 66(1) of the Transport Act 2000 (The Civil Aviation Authority (Air Navigation) Directions 2001(incorporating Variation Direction 2004)), a copy of which is published on the CAA website.

- for exemptions granted under section 4(2), the Secretary of State must be satisfied that the requirement is not necessary to secure public safety, the health and safety of individuals taking part in spaceflight activities in a role or capacity prescribed under section 17(1); or compliance with international obligations. An exemption enabled by the regulations may be time limited (subsection (5)).
- 64 Subsection (6) is a general power to make regulations in respect of range control services, in particular to cover the matters listed in subsection (6)(a) to (f). These may relate to the range control service provider itself and also to individuals providing services on its behalf. In addition, subsection (6)(g) to (j) enables regulations to provide for the procedure for the grant and handling of exemptions.
- 65 Subsection (7) enables the regulator to issue guidance about how a holder of a range control licence may comply with safety requirements stipulated in regulations made under the preceding subsection.
- 66 Subsections (8) and (9) provide for offences relating to range control licensing.

Licences

Section 8: Grant of licences: general

- 67 Section 8(1) gives the regulator a discretion in respect of grant of a licence, providing the regulator thinks fit to grant such a licence and subject to the subsequent provisions of the section.
- 68 Under subsection (2), 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 (of any type); and is not contrary to the national interest.
- 69 Under subsection (3), the regulator is also precluded from granting a licence unless 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 to carry out the licensed activities.
- 70 Subsection (4) provides that where a person has been appointed to perform a licensing function under section 16, that person must obtain the prior approval of the Secretary of State before granting a licence.
- 71 Subsection (5) contains a power to make regulations concerning the making and determination of licence applications.
- 72 Subsection (6) enables the regulations to make provision concerning procedural, administrative and evidential matters relating to a licence application.
- 73 Subsection (7) enables the regulations to cover a range of inspections and enquiries that prescribed persons, or persons of prescribed descriptions, may need to carry out on behalf of the regulator. The purpose of such enquiries and inspections will be to enable the regulator to be satisfied that any tests set out in, or enabled by, sections 8, 9 and 10 (as appropriate) are met, before a licence can be granted.

Section 9: Grant of operator licences: safety

74 Subsection (1) provides that the regulator must not grant an operator licence unless satisfied that the requirements in subsections (2) to (4) are met. Subsections (2) and (3) relate to risk assessments for persons taking part in the proposed spaceflight activity, while subsection (4) covers the risks to health, safety and property to be addressed in respect of everyone else.

These Explanatory Notes relate to the Space Industry Act 2018 (c.5) which received Royal Assent on 15 March 2018

- 75 Subsection (2) requires the applicant to carry 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 requirements prescribed by subsection (3).
- 76 Subsection (4)(a) requires the applicant to take all reasonable steps to reduce risks from spaceflight activities to the health, safety and property of other persons to "as low as reasonably practicable". The term "as low as reasonably practicable" is a familiar concept in health and safety law, providing a benchmark for risk assessments under section 2 and section 3 of the Health and Safety at Work Act 1974.¹⁷ Separately, section 9(4)(b) requires an additional test to be satisfied. The residual risks, even if the operator has met the test in section 9(4)(a), must also be acceptable, or else the licence cannot be granted.
- 77 Subsections (5) and (6) enable the making of regulations concerning matters relating to risk assessment and determining acceptable levels of risk for the purposes of subsection (4)(b).
- 78 Subsection (7) provides for the issuing of guidance to licence applicants about meeting requirements under subsections (2) to (4) of this section.
- 79 Subsection (8) provides that the regulator must have regard to any guidance the Secretary of State may issue to the regulator (if that person is not the Secretary of State) for the purposes of the regulator's functions under this section.
- 80 Subsection (9) provides that any person carried on a spacecraft or carrier aircraft is "taking part in" spaceflight activities, irrespective of whether they are involved in the operating of such craft, or not. This means that the risk assessment requirements of subsections (2) and (3) will be applied in respect of such persons, rather than the requirements of subsection (4).

Section 10: Grant of spaceport licence

81 This section states that the regulator must not grant a licence to operate a spaceport unless satisfied that the applicant has taken all reasonable steps to ensure that risks to public safety are as low as reasonably practicable; and that any other requirements prescribed in secondary legislation made under paragraph (b) are met.

Section 11: Grant of licences: assessments of environmental effects

- 82 This section ensures assessments of environmental effects have been conducted and considered prior to the grant of a spaceport or relevant operator licence.
- 83 Subsections (1) and (2) prohibit the regulator from granting either a spaceport or an operator licence that authorises launches of spacecraft or carrier aircraft, unless an applicant has submitted an assessment of environmental effects.
- 84 Subsection (3) defines an 'assessment of environmental effects' in relation to both spaceport licences and operator licences that authorise launches of spacecraft or carrier aircraft.
- 85 Subsection (4) enables the regulator to accept an assessment conducted either in compliance with other legislation, or prepared in connection with a previous application under this Act, where there has been no material change of circumstances since the assessment was prepared. The purpose of this subsection is to avoid duplication of effort, enabling the regulator to accept a previously prepared assessment as an assessment of environmental effects where appropriate.
- 86 Subsection (5) places a duty on the regulator to take into account the assessment of

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¹⁷ http://www.hse.gov.uk/risk/theory/alarpglance.htm

- environmental effects in determining a relevant licence application and in deciding on any licence conditions that may be attached to such a licence.
- 87 Subsection (6) places a duty on the regulator to issue guidance about certain aspects of the assessment of environmental effects, namely the form, contents, level of detail, and time for submission. Such guidance may also specify certain matters which need only be dealt with in an assessment of environmental effects if the regulator so requires on a case by case basis.
- 88 Subsection (6) also places a duty on the regulator to issue guidance on when a direction under subsection (4) may be given.

Section 12: Terms of licences

- 89 This section 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.
- 90 Subsection (1) clarifies that such a licence may permit the licensee to carry out one or more type of spaceflight activity. This does not mean that a regulator is precluded from issuing different licences for different categories of activity. Equally, this does not preclude any particular type of administrative process for licence applications. Unless regulations made under section 8(5) and (6) were to prescribe otherwise, there is administrative discretion for the regulator to require separate applications for different categories of activity or one single application for all.
- 91 Subsection (5) defines "launch activities" for the purposes of subsection (4).

Section 13: Conditions of licences

- 92 Subsection (1) 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.
- 93 Subsection (3) provides for regulations to require that specific licence conditions must be applied to a licence by a regulator in certain cases or circumstances.
- 94 Subsection (4) enables the regulator to accept or recognise the licences, authorisations, approvals or processes of countries designated by the Secretary of State. Such matters may be recognised or taken into account, when the regulator is deciding licence conditions.
- 95 Subsection (5) requires the Secretary of State to publish a list of countries designated under subsection 4(a). The Secretary of State has administrative powers to designate countries for subsection (4)(a) purposes. This will streamline licensing processes and reduce duplication between the regulatory processes of different States. This power in subsection (4)(a) is different to the Order making power in section 4(1), since the former does not avoid the need for a licence, whereas the latter enables exemption from licensing.
- 96 Subsection (6) imposes a requirement on the regulator to consult with various public bodies when deciding licence conditions.
- 97 There is a power in subsection (7) to prescribe how licensees are to comply with prescribed types of licence conditions and subsection (8) makes it an offence to breach licence conditions.

Schedule 1: Particular conditions that may be included in licences

98 This Schedule lists conditions and types of conditions that may be included in a licence issued under this Act, although as subsection (1) of section 13 makes clear, this list in Schedule 1 is not exhaustive.

These Explanatory Notes relate to the Space Industry Act 2018 (c.5) which received Royal Assent on 15 March 2018

Section 14: Licences granted for specified periods

- 99 Subsection (1) permits the regulator to grant a licence for a specified period of time.
- 100 Subsection (2) provides for the renewal of a licence for a further specified period.
- 101 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.
- 102 By subsection (4), the provisions of the Act which apply to the grant of a licence also apply to the renewal of a licence.

Section 15: Transfer, variation, suspension or termination of licence

- 103 This section provides for the transfer, variation, suspension or termination of a licence under this Act.
- 104 Under subsection (2), the regulator may only consent to the transfer of a licence if satisfied that: (a) the transfer of a licence will not impair national security; is consistent with the United Kingdom's international obligations (of any type); and is not contrary to the national interest; (b), the new licence holder has the necessary financial and technical resources and is otherwise a fit and proper person to carry out the licensed activities; and (c) that persons performing any licensee obligations under the licence on behalf of the licensee are also fit and proper.
- 105 By virtue of subsection (6), where the regulator is not the Secretary of State, the latter must be consulted before revocations, transfers or variations are effected.
- 106 Subsection (7) provides that licence conditions may continue beyond the date that a licence ends.

Exercise of regulatory functions by bodies other than Secretary of State

Section 16: Power of Secretary of State to appoint person to exercise functions

- 107 Subsection (1) 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. Subsection (2) sets out various other matters that may be specified in regulations pertaining to such an appointment and subsection (3) enables more than one person to be appointed.
- 108 Subsection (4) modifies sections 2 and 15 of the Act.
- 109 Subsection (5) confers a power on the Secretary of State to give directions to an appointed person in the interests of national security or otherwise in the national interest.
- 110 Subsection (6) 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 do under this Act.
- 111 Subsection (7) clarifies that other (including common law) powers to arrange for others to exercise functions on the Secretary of State's behalf, are not displaced.

Individuals taking part in spaceflight activities etc

Section 17: Informed consent

112 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 informed consent requirements and prescribed criteria concerning age and mental capacity are met.

These Explanatory Notes relate to the Space Industry Act 2018 (c.5) which received Royal Assent on 15 March 2018

- 113 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 9 Regulations may make provisions about specified requirements including the form and content of such forms (subsection (3)).
- 114 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).

Section 18: Training, qualifications and medical fitness

- 115 This section 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 and the provision of range control services and working at sites used for or in connection with such activities. The term "in connection with" enables such training regulations to apply to persons working at a broad range of sites, beyond the range control facility or spaceport. For instance, relevant training facility sites might be subject to such regulations.
- 116 Subsections (4) and (6) prohibit and make it an offence for a licence holder to allow individuals to take part in such activities or work at such sites unless they meet the requirements prescribed in training regulations. The effect of subsection (7) is that both a licence holder and individuals may commit this offence.
- 117 Subsection (3) enables the regulator to issue guidance about how a person carrying on spaceflight activities, operating a spaceport or providing range control services may comply with training regulations.

Schedule 2: Training regulations: further provision

118 This Schedule provides examples of provisions that may be made by training regulations under section 17, but is non-exhaustive.

Safety

Section 19: Safety regulations

- 119 This section provides for the making of "safety regulations" for the purposes listed in subsection (1), with examples provided pursuant to subsection (2) and Schedule 3. The safety purposes listed in subsection (1) are those of: securing the safe operation of spaceports and mission management facilities (a term defined in subsection (4)); securing that spaceflight activities are carried out safely; and safety purposes related to range.
- 120 Subsection (3) enables the regulator to issue guidance in respect of the requirements imposed by safety regulations.

Schedule 3: Safety regulations: further provision

121 This Schedule provides examples of the provisions that may be made by safety regulations under section 19 and sets out the extent of the regulation making powers for the making of those regulations, but the examples are non-exhaustive.

Section 20: Investigation of accidents

- 122 Subsection (1) provides for the making of regulations concerning the investigation of accidents arising out of spaceflight activities or activities licensed under this Act or OSA, whether occurring in the United Kingdom or elsewhere. There are no accident investigation provisions in OSA itself.
- 123 Subsection (2) provides a power that corresponds to that in section 75(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.

Section 21: Assistance etc with performance of regulator's safety functions

- 124 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.
- 125 Subsection (5) enables a qualifying health and safety authority to recover its costs from the regulator.
- 126 Subsection (6) enables the making of regulations to restrict the functions that this section applies to.

Security

Section 22: Offences against the safety of spacecraft etc

127 This section gives effect to the offences in Schedule 4.

Schedule 4: Offences against the safety of spacecraft etc

- 128 This Schedule sets out offences against the safety of spacecraft and carrier-aircraft; offences endangering safety at spaceports and offences in relation to dangerous articles. Offences in paragraphs 1, 2, 3 and 5 are based on offences against the safety of aircraft under Part I of the Aviation Security Act 1982. The offence at paragraph 4 is based on the offence in section 1 of the Aviation and Maritime Security Act 1990, concerning endangering safety at aerodromes.
- 129 Paragraph 1 makes it an offence to hijack a UK launched spacecraft.
- 130 Paragraph 2 makes it an offence to destroy, damage or endanger a UK launched spacecraft or carrier-aircraft.
- 131 Paragraph 3 makes it an offence to unlawfully and intentionally destroy, damage or interfere with property if this is likely to endanger the safety of a UK-launched spacecraft.
- 132 Paragraph 4 makes it an offence to commit acts of violence at a spaceport. The offence at sub-paragraph (2)(a)(ii) is drafted to dovetail with paragraph 2(3) of Schedule 4. Therefore, certain craft being prepared for launch or having completed a flight in the previous 24 hours are carved out from sub-paragraph (2)(a)(ii) because they are covered by paragraph 2(3).
- 133 Paragraph 5 makes it an offence to possess certain articles specified in sub-paragraph (2) on board a spacecraft or at a spaceport, mission management or range control facility in the UK.
- 134 Paragraph 5(5) and (6) treat a person as having an article with him or her in certain specified circumstances but these paragraphs do not limit the circumstances in which a person will be regarded as having an article with him or her, but rather it extends them.

Section 23: Security regulations

- 135 This section provides for the making of "security regulations" concerning the security of activities and facilities regulated under the Act. Subsection (3) enables the Secretary of State to issue guidance on compliance with the requirements imposed by the security regulations.
- 136 Subsection (4) enables the Secretary of State to suspend by order a requirement in security regulations at military aerodromes where necessary for the operational requirements of the armed forces.

Schedule 5: Security regulations: further provision

137 This Schedule provides a non-exhaustive list of examples of the provisions that may be made through security regulations under section 23.

Section 24: Spaceport byelaws

- 138 Subsection (1) enables a person authorised by a licence to operate a spaceport to make byelaws within that spaceport, for various security purposes.
- 139 Subsection (2) lists the types of matters that byelaws may address. The matters covered by subsection (2) do not limit the scope of subsection (1).
- 140 Subsections (3) and (4) relate to powers of spaceport officials and constables respectively in respect of the exercise of powers under spaceport byelaws.
- 141 In order to be effective, spaceport by elaws 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).
- 142 Subsections (8) and (9) make provision for offences relating to contravention of spaceport byelaws.

Section 25: Provision of advice and assistance on security matters

- 143 Subsection (1) enables a regulator to provide advice and assistance in response to a request from a holder of a licence (or an associated company) under this Act.
- 144 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.
- 145 Subsection (7) permits the regulator or the Secretary of State to recover its costs from the recipient of advice given under this section.

Enforcement

Section 26: Monitoring and enforcement by regulator

- 146 Subsection (1) creates monitoring and enforcement responsibilities for the regulator, for the purposes set out in subsection (2).
- 147 Subsection (3) contains regulation making powers to enable the regulator to exercise monitoring and enforcement functions for the stated purposes.
- 148 Subsection (4) confers a power on the regulator to investigate and, except in Scotland, a power to prosecute offences contained in or made under the Act. In Scotland, offences are prosecuted by the Lord Advocate.

Section 27: Power to give directions: breach of licence conditions etc

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

Section 28: Power to give directions: safety, security etc

151 Subsection (1) of this section gives the regulator power to give directions to a regulated person under the Act in the interests of health or safety.

These Explanatory Notes relate to the Space Industry Act 2018 (c.5) which received Royal Assent on 15 March 2018

- 152 Subsections (2) to (4) give the Secretary of State power to give directions to the regulator or the regulated person under the Act in the interests of health or safety, spaceflight security, national security or relations with another country.
- 153 There are definitions of "spaceflight security", "act of violence" and "regulated person", in subsections (6), (7) and (8).
- 154 Subsection (7) is modelled on section 10 of the Aviation Security Act 1982. This subsection provides that if the behaviour, irrespective of where in the world it occurs, would constitute behaviour that would amount to one of the listed offences, then it is an act of violence as defined. The reference to the Scottish offence of malicious mischief has been made because the elements of that offence are different to the other offences listed.

Section 29: Power to give directions: international obligations of the UK

155 Subsection (1) gives the Secretary of State power to give directions to a regulated person under the Act in the interests of discharging the United Kingdom's international obligations.

Section 30: Consultation about directions

156 This section sets out consultation requirements before making directions under sections 27, 28 and 29.

Section 31: Further provision about directions

- 157 This section contains further provisions on giving directions under sections 27, 28 and 29, including a power to stop activities or to require the disposal of objects or materials used in connection with spaceflight activities.
- 158 Subsection (3) provides that it is an offence to fail to comply with a direction made under sections 27, 28 and 29 and to disclose any direction made under sections 28 and 29, where under subsection (2) the Secretary of State has notified that disclosure is against the interests of national security, relations with another country or against the commercial interests of a third party.
- 159 The rest of the section is self-explanatory.

Section 32: Warrants authorising entry or direct action

- 160 This section 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).
- 161 Subsection (9) provides that it is an offence to intentionally obstruct a person exercising powers granted by an enforcement warrant.

Section 33: Power to authorise entry in emergencies

- 162 Subsections (1) and (2) of this section provide a power for the Secretary of State to authorise a 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 and the matter is urgent.
- 163 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.
- 164 Subsections (4), (5) (6) and (7) provide for the form an enforcement authorisation should take, the powers it confers and its duration.

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165 Subsection (8) provides that it is an offence to intentionally obstruct a person exercising powers granted by an enforcement authorisation.

Liabilities indemnities and insurance

Section 34: Liability of operator for injury or damage etc

- 166 Subsection (1) of this section 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 Act.
- 167 Subsection (2) provides for the strict liability of an operator for injury or damage caused in the United Kingdom or its territorial waters; to an aircraft in flight above such land or water; or to persons or property on board such aircraft. The injury or damage must be caused by a 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. Where there is more than one operator involved in a space activity, there is nothing to stop such persons contractually allocating risk between themselves, but the person suffering injury or damage under this provision would still have a straightforward right of claim. Moreover, the operator for the purposes of this provision does not have to be a person in possession of an operator licence. It could be a person using a spacecraft or space object pursuant to an exemption under section 4, or a person who is carrying out spaceflight activities unlawfully.
- 168 Subsection (2) 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.
- 169 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).
- 170 Subsection (5) provides that regulations may impose a cap on the liability of the holder of an operator licence in relation to injury or damage 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).
- 171 In this section, "injury or damage" means personal injury, death or physical damage ((section 69(1)). Regulations may prescribe the framework or methodology for a regulator to specify individual limits in licences (subsection (6)).

Section 35: Power of Secretary of State to indemnify

- 172 This section gives the Secretary of State a power to indemnify in respect of injury or damage that results from spaceflight activities that are carried out by a licensed operator.
- 173 This power is subject to the conditions in subsection (1).
- 174 Subsection (2) provides that the Secretary of State may indemnify a licensee where damages are in excess of a liability amount or an insured amount. Subsections (a) and (b) set out the meaning of these terms.
- 175 Subsection (3) provides that the Secretary of State must indemnify a claimant where injury or damage is caused which is above the amount of a licensee's liability where that liability has been limited by regulations under section 34(5). The requirement for the Secretary of State to indemnify a claimant only arises in situations where an operator's liability is capped under Section 34(5).

- 176 Subsection (4) enables 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 section may be exercisable.
- 177 Subsection (5) enables the making of regulations that may limit or constrain the Secretary of State's duty or discretion to make payments and to make supplemental provisions in relation to participating in legal proceedings as set out in subsection (4).

Section 36: Obligation to indemnify government etc against claims

- 178 Subsection (1) imposes an obligation on persons carrying on spaceflight activities to indemnify the Government and other persons listed in subsection (2) against claims for loss or damage. In cases where the Liability Convention applies, the United Kingdom may face claims as a launching state.¹⁸
- 179 Subsection (3) makes this obligation to indemnify subject to any maximum liability specified in an operator licence under section 12(2) and to regulations made under section 4(4) which relate to exemptions from the requirement to hold an operator licence.
- 180 Subsection (4) sets out the circumstances where the obligation to indemnify under this section will not apply.

Section 37: Regulator etc not liable in respect of spaceflight-related actions

- 181 This section provides protection from liability for the regulator and other persons listed in subsection (2), who take or fail to take "relevant actions" or for the way in which such persons take "relevant actions", as defined in subsection (3).
- 182 This protection does not apply in the case of wilful misconduct or gross negligence (subsection (4)). Gross negligence is defined in subsection (5).

Section 38: Insurance

- 183 Subsection (1) enables regulations to prescribe insurance requirements for licence holders and other persons engaged in spaceflight activities. Therefore, even a person who is exempt from the requirement to hold an operator licence under section 4(3) may still be required to be insured under regulations.
- 184 Subsection (2) provides a power for the Secretary of State to make available insurance or reinsurance to enable any person to comply with the insurance requirements prescribed in regulations or in licence conditions. Such regulations may only be made with the consent of the Treasury.
- 185 Subsection (3) enables the Secretary of State to make arrangements with any person for the purpose mentioned in subsection (2). Such arrangements may include an indemnity or guarantee, or the making of grants (subsection (5)). The arrangements must not include the making available of insurance or reinsurance by the Secretary of State (as such insurance provision can only be made by way of regulations pursuant to subsection (2)).
- 186 Subsections (6), (7), (9) and (10) comply with the Parliamentary convention that the destination of any public funds must be set out and with reporting requirements. 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.

¹⁸ Articles II and III of the Liability Convention.

187 Subsection (8) states that 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.

Powers in relation to land

Section 39: Powers to obtain rights over land

- 188 Subsections (1) and (2) enable the Secretary of State to make an order creating rights over land in favour of a "qualifying person", defined in subsection (3) as the Secretary of State, a holder of a range control licence, or the holder of a spaceport licence. An order may be made where the Secretary of State considers it is appropriate for any of the purposes set out in subsection (1): to secure safe and efficient use of land for spaceflight activities, to ensure that any necessary services in relation to the land are provided, and to secure that spacecraft and carrier aircraft may be navigated safely.
- 189 Rights created under this section may include easements for England, Wales and Northern Ireland or servitudes for Scotland, rights to carry out and maintain works and rights to install structures etc. on, under or over land (subsection (4)).
- 190 The person granted the right must give notice to the occupier if it is necessary to enter the land (subsections (6) to (7)). No notice is required in case of emergency or to carry out maintenance (subsection (8)).
- 191 It is envisaged that this section will be used as a last resort, in cases where licence holders are able to demonstrate that they have exhausted commercial options for accessing or carrying out works etc. on land in the vicinity of the spaceport site.
- 192 These orders are subject to special parliamentary procedure in some circumstances if the land is held by a statutory undertaker (subsection (12)).

Schedule 6: Orders under sections 39 and 41

- 193 Schedule 6, Part 1 makes further provision in relation to orders under section 39 and to "land orders" as that term is defined in section 41(4)(a).
- 194 It includes requirements for serving and publishing notice of a proposed order and sets out procedures for dealing with objections to the order. It also sets requirements for serving and publishing notice when an order has been made.

Section 40: Orders under section 39: offences

- 195 This section makes it an offence to interfere with any works carried out on any land, or with anything installed on, under, over or across any land whilst an order under section 39 is in force.
- 196 It also makes it an offence to obstruct anyone who is exercising a power of entry under section

Section 41: Power to restrict use of land to secure safety

197 This section enables the Secretary of State to impose, by order, temporary prohibitions or restrictions on the use of a specified area of land or water to ensure that spacecraft or carrier aircraft may be safely launched or landed, or to prevent the endangerment of persons or property. For example, orders 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. Orders must specify the periods for which the restriction or prohibition will be in force.

- 198 Orders under this section may not extend to tidal waters beyond the territorial sea adjacent to the United Kingdom (subsection (2)).
- 199 Subsection (5) makes contravening an order an offence.

Schedule 6: Orders under sections 39 and 41

- 200 As set out above in relation to section 39, Part 1 of Schedule 6 makes provision in respect of orders under section 39 and land orders as defined in section 41(4)(a). Part 2 of Schedule 6 sets out the procedure to make an order under section 41 that is not a land order.
- 201 Schedule 6 includes requirements for serving and publishing notice of a proposed order and sets out procedures for dealing with objections to the order. It also sets requirements for serving and publishing notice when an order has been made.

Section 42: Power of entry for purposes of survey

- 202 This section enables the Secretary of State to authorise a person to enter land to make a survey in connection with an order or proposed order under section 39. The authorised person must notify the occupier of the land eight days before seeking admission.
- 203 Subsection (5) makes it an offence to obstruct an authorised person.

Section 43: Challenges to and commencement of orders

204 This section sets out that an order made under section 39 or section 41 may not be challenged in any legal proceedings other than by the process set out in Schedule 7. Proposals to make such orders may be objected to under the process set out in Schedule 6, but not challenged in any legal proceedings. Such orders will enter into force six weeks after notice that the order has been made is published. However, such orders may be quashed in accordance with provisions in Schedule 7.

Schedule 7: Powers in relation to land: quashing of orders

- 205 Orders under section 39 or section 41 are subject to the Schedule 7 provisions for quashing orders.
- 206 These provide that an aggrieved person may apply to the relevant court, within six weeks of the notice being published in accordance with Schedule 6, on the grounds that the order is not within the powers of the Secretary of State or that any requirement of the Act has not been complied with in relation to the order.
- 207 It also sets out the process for the High Court, or the Court of Session in Scotland, to determine an application.

Section 44: Powers in relation to land: compensation

208 This section provides for Schedule 8 to have effect.

Schedule 8: Powers in relation to land: compensation

- 209 This Schedule provides for payment of compensation if the value of an interest in land has been diminished as a consequence of an order under either section 39 or section 41.
- 210 It sets out the right of persons to recover compensation, that the land compensation provisions have effect and the procedure if the interest in land is subject to a mortgage (or a heritable security in Scotland).
- 211 Part 2 provides for compensation should land be damaged, or should use of the land or enjoyment of rights in or over the land be disturbed.

212 Part 3 provides that any dispute over whether compensation is payable, the amount that is payable or to whom it is payable should be determined by the appropriate tribunal.

Section 45: Registration of orders

213 This section provides for the registration of any orders made under section 39, with appropriate requirements for registering orders affecting land in each jurisdiction of the UK.

Powers in relation to land: supplementary

Section 46: Special provisions relating to statutory undertakers

214 This section gives effect to Schedule 9, which makes provision about compensation to statutory undertakers in respect of an order under section 39 or 41, and for the adjustment of their functions as may be necessary.

Schedule 9: Powers in relation to land: special provisions relating to statutory undertakers

- 215 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 section 39 or 41 in relation to land held by the statutory undertaker for carrying on its undertaking.
- 216 Part 2 relates to orders or directions made under section 39 or section 41 which affect a statutory undertaking.
- 217 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.
- 218 Paragraph 5 allows the Secretary of State to make an order relieving a statutory undertaker from an obligation if fulfilling the obligation is impracticable as the result of an order made under section 39 or section 41.
- 219 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.
- 220 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.
- 221 Paragraph 9 provides a power of entry to carry out a survey and paragraph 10 makes provision for compensation payable as a consequence of entering the land or carrying out the survey.

Section 47: Compensation in respect of planning decisions relating to spaceport safety etc: England and Wales and Scotland

- 222 This section allows local planning authorities to recover compensation from a spaceport operator or range control service provider if the planning authority has had to pay compensation for certain reasons. Those reasons are set out in subsections (1) and (3). Subsections (5) to (7) make provision for the local authority to require the spaceport operator or range control service provider to purchase an interest from it.
- 223 Subsection (8) sets out that any dispute will be referred to the Secretary of State for determination.

Section 48: Compensation in respect of planning decisions relating to spaceport safety etc: Northern Ireland

224 This section allows a district council in Northern Ireland to recover money from a spaceport operator or a range control service provider 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.

Section 49: Amendment and revocation of orders

- 225 This section provides for the power to amend or revoke an order which is made under section 39, or paragraphs 4 or 5 of Schedule 9. Amendment or revocation of these orders is by the same means and subject to the same process as the original orders.
- 226 It also provides that orders made under section 41 can be amended to shorten or remove a specified time period or can be revoked. Where the specified time periods are shortened or removed or the original order is revoked the order has immediate effect and the Secretary of State must notify certain persons.
- 227 Other orders amending orders made under section 41 become operative six weeks after they are made and are subject to Schedule 6 in the same way as ordinary orders under sections 39 and 41.

Section 50: Powers in relation to land: notices

228 This section applies section 56 of the Civil Aviation Act 1982 to notices under the provisions of the Act 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.

Offences and Civil Sanctions

Section 51: Application of criminal law to spacecraft etc

- 229 This section relates to acts or omissions taking place on a spacecraft or carrier aircraft that has been launched from the United Kingdom. Subsection (1) provides that such acts or omissions, if constituting an offence in the United Kingdom, will also constitute an offence on board a spacecraft or carrier aircraft when such a craft is outside the United Kingdom. No offence would occur if any act or omission is expressly or impliedly authorised under the law of the United Kingdom. Section 92(3) of the Civil Aviation Act 1982 also applies to offences committed on aircraft.
- 230 Any relevant acts or omissions are deemed to have been committed in the United Kingdom. Jurisdiction is conferred on the United Kingdom criminal courts to try any alleged offences (subsection (4)).

Section 52: Offences on board spacecraft: supplementary

- 231 This section allows regulations to be made relating to offences that occur on board a spacecraft.
- 232 The regulations can only be made in relation to the listed provisions set out in subsection (2) (sections 94 and 95 of the Civil Aviation Act 1982, and subsections (4) and (5) of section 92 as they apply by virtue of section 95 of that Act) and the power to make regulations is subject to the matters set out in subsections (3) and (4).

Section 53: Penalties for offences under the Act

233 This section sets out the penalties that a person would be subject to if they were to commit an offence under the Act.

Section 54: Offences under regulations

234 This section enables the Secretary of State to make regulations creating offences. These may provide for offences under the regulations to be triable only summarily, or either summarily or on indictment. This section also sets out the associated penalties.

Section 55: Offences under regulations: extended time limit in case of accident investigation etc

235 This section 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 subsection (1) (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.

236 This does not affect the time limit for offences triable either way.

Section 56: Defences

- 237 This section provides a defence relating to offences under the Act where a person has exercised all due diligence and has taken all reasonable precautions to avoid committing an offence.
- 238 Subsection (3) sets out the provisions in respect of which that defence does not apply.
- 239 Subsection (4) enables regulations that create offences to provide for defences in relation to those offences.

Section 57: Offences by bodies corporate

240 This section sets out the position where an offence has been committed by an officer of a body corporate. The section also provides for the rules of court relating to the service of documents, and to the payment of any fine imposed on conviction for an offence.

Section 58: Offences by partnerships: England, Wales and Northern Ireland

241 This section provides for when an offence has been committed by a partnership, in England, Wales or Northern Ireland. It sets out the relevant sections of the Criminal Justice Acts which apply to partnerships as they do to bodies corporate, and that the rules of court relating to the service of documents have effect for partnerships as they do for bodies corporate.

Section 59: Civil sanctions

242 This section enables regulations providing for civil sanctions to be made in respect of criminal

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- offences created by the Act, or by regulations made under it (except offences under Schedule 4 (offences against the safety of spacecraft etc)). This power corresponds to that in Part 3 of the Regulatory Enforcement and Sanctions Act 2008 (c.13) ("RESA").
- 243 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.
- 244 This means that regulations may provide for stop notices to apply when activity presents a significant risk of harm to public safety; to persons carried in a spacecraft or carrier aircraft; to persons working at spaceports, mission management facilities or sites used for provision of range control services; to the interests of persons in relation to the use of land, sea or airspace; or to the interests of persons with interests in property being carried by the spacecraft.
- 245 Regulations making provision enabled by subsection (2) must be made under the affirmative procedure.

Appeals

Section 60: Appeals

246 This section provides that Schedule 10 makes provision for appeals against decisions made under the Act and under OSA. In particular, paragraph (b) provides for the establishment of panels to hear such appeals.

Schedule 10: Appeals in connection with spaceflight activities

- 247 This Schedule contains provisions regarding appeals in relation to certain decisions made under the Act and OSA.
- 248 Part 1 of this Schedule provides for regulations to make provision for the establishment of one or more panels to consider appeals. These regulations may set out the composition of a panel, terms of appointment, remuneration and conduct amongst other things.
- 249 Part 2 sets out the decisions against which an appeal can be brought and by whom.
- 250 Part 3 provides for the determination of appeals. Appeals may only be brought with the permission of the Panel. Regulations may make provisions relating to the determination of an appeal.
- 251 Part 4 contains provisions relating to the procedure to be followed when an appeal has been made and provision for the making of procedural regulations in relation to appeals.
- 252 Part 5 provides that the Secretary of State by way of regulations may prescribe fees in respect of anything dealt with by a panel under the Schedule. Any prescribed fee must be reasonable and proportionate to the costs to which it relates.

Miscellaneous

Section 61: Register of launches

- 253 Subsection (1) requires the Secretary of State to maintain a public register of launches from a UK spaceport which meet the criteria set out in subsection (2). Subsection (3) sets out the information that may be included in the register.
- 254 Subsection (5) allows the Secretary of State to maintain a single register of launches and space

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objects to satisfy the registration duty duties under subsection (1) of this section and section 7 of OSA. There is an obligation under article 2 of the UN Registration Convention¹⁹ to maintain a register of space objects.

Section 62: Charging schemes

255 This section gives effect to Schedule 11, which makes provision for charging schemes in respect of charges for carrying out functions and the provision of services under this Act. There is no restriction concerning the persons who might be subject to charges pursuant to a charging scheme. Examples of persons who might be subject to charges would be: licence applicants and holders; persons exempted under section 4; persons involved in receiving or offering relevant training (section 18).

Schedule 11: Charging schemes

- 256 Paragraph 1 provides the meaning of the terms "charging scheme" and "charging authority".
- 257 Paragraph 2 provides a power for the CAA to make a scheme for payment of charges in respect of its functions conferred by or under this Act and specified in a charging scheme. Such schemes can be made administratively and the CAA can make, vary or revoke a scheme. The CAA must publish the scheme, variation or revocation and the date this comes into effect must be at least 14 days after publication (sub-paragraph (3)). Sections 8 and 13 of the Civil Aviation Act 1982 make provision for sums received by CAA.
- 258 Paragraph 3 provides for charging schemes to be made by regulations in respect of charges by persons other than the CAA, providing for payment in respect of performance of the functions specified in the scheme. Such regulations may make provision for the destination or remission of sums received.
- 259 Paragraph 4 sets out matters that may be included in a charging scheme.
- 260 Paragraph 5 sets out the obligations that a charging authority has in relation to consulting before making a charging scheme.
- 261 Paragraph 6 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.
- 262 Paragraph 7 sets out that where a charging scheme provides for a charge to be made, a charging authority has a duty to charge accordingly but it may waive all or part of a charge if it thinks fit. However, paragraph 7 does not affect a charging authority's power to enter into agreements for the payment of charges where there is no charging scheme in place.

Section 63: Provision of advice and assistance by or to an appointed person

263 Subsection (1) enables the Secretary of State to obtain advice and assistance from a person appointed under section 16. The Secretary of State may require the appointed person to provide advice or assistance to another person but the appointed person may refuse to provide such advice until they are paid reasonable charges for provision of that advice or assistance (subsection (3)). Subsection (4) entitles the appointed person to recover its costs of providing such advice. Subsections (6) and (7) give the Secretary of State a power to provide advice and assistance to an appointed person on request and to recover the reasonable expenses for providing the advice and assistance.

¹⁹ Convention on Registration of Objects Launched into Outer Space "the Registration Convention".

Section 64: Co-operation between Secretary of State and other public authorities

264 This section allows the Secretary of State and the public authorities listed under subsection (2) to enter into arrangements and exchange information in order to carry out functions under or related to the Act. The list of other public authorities under subsection (2)(a) to (f) is not exhaustive, by virtue of subsection (2)(g). These arrangements must be reviewed periodically and revised as appropriate.

Section 65: Agreements with other countries: compliance with requirements etc

265 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 relating to spaceflight activities is to be taken as compliance with prescribed requirements or prohibitions in subordinate legislation.

Section 66: Use of records and documentary evidence

266 This section 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.

General

Section 67: Minor and consequential amendments

- 267 This section gives effect to the minor and consequential amendments contained in Schedule 12.
- 268 Subsection (2) enables the Secretary of State to make other consequential amendments by regulation.
- 269 Subsection (3) provides that regulations made under this section may not amend or repeal primary legislation. The effect of this is that the power to make minor consequential amendments could only enable the making of amendments to secondary legislation but not primary legislation.

Schedule 12: Minor and consequential amendments

- 270 This Schedule sets out changes to other legislation as a consequence of this Act.
- 271 Paragraph 1 amends the Land Registration Act (Northern Ireland) 1970 by inserting a new paragraph 53 into Schedule 11 to that Act. As such, any order or direction under section 44 of this Act which affects land in Northern Ireland must be registered on the Statutory Charges Register.
- 272 Paragraph 2 inserts a new provision into section 1 of the Magistrates' Courts Act 1980 so that an offence under paragraphs 1, 2 or 4 of Schedule 4 to this Act are offences for which a summons or warrant for arrest may be issued.
- 273 Paragraph 3 amends section 11 of the Civil Aviation Act 1982. This amendment exempts the CAA from applying charges in accordance with section 11 of the Civil Aviation Act 1982 for any functions given to them by regulations made under section 15 of this Act.
- 274 Paragraph 4 amends section 38 of the Aviation Security Act 1982 so that references in that Act to an aircraft includes a reference to a medium-range rocket.
- 275 Paragraph 5 amends Schedule 1 to the Criminal Justice Act 1982 excluding the offences under paragraphs 1, 2, 3 and 4 of Schedule 4 to this Act from section 32 of the Criminal Justice Act 1982.

- 276 Paragraph 6 inserts an offence under paragraph 1 of Schedule 4 to the Act as a qualifying offence under section 65A of the Police and Criminal Evidence Act 1984.
- 277 Paragraph 7 amends section 82 of the Airports Act 1982. It provides that in this Act, like the Aviation Security Act 1982, a reference to an aircraft includes a reference to a medium-range rocket by inserting new subsections (1C) to (1F).
- 278 Paragraphs 8 to 14 (inclusive) amend the Outer Space Act 1986 ("OSA"). Section 3(3) (prohibition of unlicensed activities) is amended to provide for exemptions to be made by the order itself or by the Secretary of State. Section 3(4) is amended so that any order concerning exemptions under subsection (3) must be made by the affirmative resolution procedure, in line with the procedure for section 4(2) of this Act, as opposed to negative resolution procedure, which is the applicable procedure in section 3(4) OSA currently. In addition, other amendments to OSA provide for procedural matters relating to exemption applications and for limiting the period of an exemption (new subsection (3ZA) and subsection (3A)(za) to (zd) OSA).
- 279 Subsection (3)(d) of section 4 of OSA 1986 is removed. A new section 4A concerning charging provisions is inserted and particularises what a charging scheme made by the Secretary of State under the OSA may specify following an appropriate consultation. The Secretary of State is entitled to charge for an application for a licence under a given scheme but may choose to waive part or the entirety of such a charge. Section 5 of the OSA is amended by paragraph 10. A new section 6A is inserted into the OSA pursuant to paragraph 12. This specifies that provisions to appeal against decisions of the Secretary of State under the OSA are provided in Schedule 10 to this Act.
- 280 Paragraph 15 inserts an offence under paragraph 1 of Schedule 4 to this Act as a qualifying offence in article 53A of the Police and Criminal Evidence (Northern Ireland) Order 1989.
- 281 Paragraph 16 amends section 48 of the Aviation and Maritime Security Act 1990. This means that, like the Aviation Security Act 1982 and the Airports Act 1982, references in the Aviation and Maritime Security Act 1990 to an aircraft include a reference to a medium-range rocket.
- 282 Paragraph 17 amends article 2 of the Airports (Northern Ireland) Order 1994 so that references to an aircraft in that Order include a reference to a medium-range rocket.
- 283 Paragraph 18 amends Schedule 8A to the Police Act 1997 so that an offence under any of paragraphs 1, 2, 3, 4 or 5 of Schedule 4 to this Act are inserted into that Schedule.
- 284 Paragraphs 19 to 22 (inclusive) amend the Transport Act 2000. Section 70(2) of that Act is amended by inserting a new paragraph (ca). This prescribes that the CAA has a new general duty to take account of any guidance given by the Secretary of State relating to spaceflight activities within the meaning provided in this Act. Other amendments update the Act in line with this Act, for example providing that an order for possession of a spaceport or spacecraft may be made in the same way that an order may be made for an aerodrome or aircraft under section 94 of that Act. The interpretation provisions of the Act are also updated.
- 285 Paragraph 23 inserts the offences under paragraphs 1, 2, 3, 4 or 5 of Schedule 4 to this Act into Schedule 5 of the Sexual Offences Act 2003.
- 286 Paragraphs 24 and 25 amend the Criminal Justice Act 2003. Paragraph 24 amends Schedule 4 to the Act by inserting new paragraphs 33A and 33B. This makes offences under paragraphs 1 and 2 of Schedule 4 to this Act qualifying offences for the purpose of section 62 of the Act. Paragraph 25 amends Schedule 15 to the Act by inserting five new paragraphs (63I to 63M inclusive) so that offences under paragraphs 1, 2, 3, 4 or 5 of Schedule 4 to this Act are specified offences under the Act.

- 287 Paragraph 26 amends Schedule 2 to the Criminal Justice (Northern Ireland) Order 2004. This makes offences under paragraphs 1 and 2 of Schedule 4 to this Act qualifying offences for the purpose of Article 21 of the Order.
- 288 Paragraph 27 amends section 20 of the Terrorism Act 2006. The amendment inserts a new section 2A which specifies that offences under paragraphs 1, 2, 3 and 4 of Schedule 4 to this Act are to be treated as if they were Convention offences.
- 289 Paragraph 28 amends Schedule 2 to the Armed Forces Act 2006. This amendment inserts paragraphs 1, 2, 3, 4 and 5 of Schedule 4 to this Act as a "Schedule 2 offence" to the Act.
- 290 Paragraph 29 amends Schedule 2 to the Counter-Terrorism Act 2008 to include offences under paragraphs 1, 2, 3, 4 and 5 of Schedule 4 to this Act.
- 291 Paragraphs 30 and 31 amend the Criminal Justice (Northern Ireland) Order 2008. Offences under paragraphs 1, 2, 3 and 4 of Schedule 4 to the Space Industry Act 2018 are inserted into Schedule 1 to the Order as serious offences. Offences under paragraphs 1, 2, 3, 4 and 5 of Schedule 4 to this Act are also inserted as specified offences.
- 292 Paragraph 32 amends the Energy Act 2013 so that a person appointed by regulations under section 16 of this Act is a relevant person for the purposes of section 89 of that Act.
- 293 Paragraph 33 amends Schedule 4 to the Modern Slavery Act 2015 by inserting a new paragraph 36A so that the defence contained in section 45 of that Act does not apply to offences under paragraphs 1, 2, 3, 4 and 5 of Schedule 4 to this Act.

Section 68: Regulations: general

- 294 This section enables the Secretary of State to make regulations for putting this Act into effect and to achieve the purposes in section 1(1) (regulating space, sub-orbital and associated activities).
- 295 Subsections (2) and (3) enable regulations to provide for exceptions; different provisions for different areas; and supplemental, incidental, transitional or consequential provision. This may include transitional and savings provisions for licences and licence applications under OSA.
- 296 Subsection (3)(b) enables provisions of regulations to apply outside the United Kingdom, although any such provisions would have to respect the principles of international comity as regards imposing liability for extra-territorial conduct, and they would also need to take into account practical issues of enforceability.
- 297 Subsection (4) provides that regulations made under this Act are exercisable by the Secretary of State by statutory instrument.
- 298 Subsection (5) provides that regulations under this Act must be made under the negative resolution procedure, except in the case of an instrument listed in subsection (6) or an instrument containing regulations under section 70 (commencement regulations).
- 299 Subsection (6) requires only the affirmative resolution procedure to be used for:
 - section 4(2) (exempting persons or activities from a licence);
 - the first regulations to be made under section 5(2) (providing for range for spaceflight activities);
 - section 7(4) (exempting persons or services from providing unlicensed range control services);

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- the first regulations to be made under section 7(6) (provision of range control services);
- the exercise of any powers in section 9 (grant of operator licences: safety);
- the first regulations to be made under section 13(7) (prescribing how a licence holder may comply with prescribed licence conditions);
- the first regulations to be made under section 19 (safety regulations);
- the first regulations to be made under section 23 (security regulations);
- section 35(5) (limits or restrictions in respect of the Secretary of State's power to indemnify);
- section 36(3)(a) (limits or restrictions on obligation to indemnify Government etc. against claims);
- section 59 (regulations providing for civil sanctions);
- section 65 (agreements with other countries meeting compliance with requirements);
 and
- any regulations that create offences.
- 300 Subsequent regulations made under sections 5(2), 7(6), 13(7), 19 and 23 are to be made by the negative resolution procedure, as required by subsection (5).
- 301 Subsection (7) places a duty on the Secretary of State to carry out a public consultation before making regulations to which subsection (6) applies. The Secretary of State must submit a report about the consultation when laying any draft instruments containing regulations under subsection (6). This is not required where amending regulations do not make any substantial change.
- 302 Subsection (9) enables provisions under this Act that may be included in regulations to be included in an Air Navigation Order. Where an Air Navigation Order is made the affirmative resolution procedure will be required if a statutory instrument containing that provision would have had to be by affirmative resolution procedure because of subsection (6).

Section 69: Interpretation

- 303 This section defines various terms used in this Act.
- 304 Subsection (5) 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 Civil Aviation Act 1982.

Section 70: Commencement

305 This section enables the Secretary of State to bring into force by regulations the provisions in this Act, except sections 68 to 72 which automatically come into force on the day on which the Act is passed.

Section 71: Extent

306 This section provides that this Act extends to the whole of the United Kingdom, although some provisions do not extend to Northern Ireland, as provided for in subsection (2). Section 48 extends to Northern Ireland only.

307 Subsection (4) is self-explanatory.

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308 Subsection (5) allows provisions of this Act to be extended, with modifications, to the Channel Islands, the Isle of Man and any British overseas territory, by way of an Order in Council.

Section 72: Short title
309 This section is self-explanatory.

Commencement

310 Section 70 provides for commencement of the provisions in the Act. With the exception of sections 68 to 72, the provisions of the Act come into force on the days appointed by the Secretary of State by regulations. Sections 68 to 72 will come into force on the day on which the Act is passed.

Related documents

311 The following documents are relevant to the Act and can be read at the stated locations:

- UK Government Review of Commercial Spaceplane Certification and Operations:
 https://www.gov.uk/government/publications/commercial-spaceplane-certification-a
 nd-operations-uk-government-review
- Consultation on criteria to determine the location of a UK Spaceport and government response: https://www.gov.uk/government/consultations/spaceport-locations-and-criteria
- Draft Spaceflight Bill: https://www.gov.uk/government/publications/draft-spaceflight-bill
- Impact Assessment of the Act: http://www.legislation.gov.uk/ukia/2016/250
- House of Commons Science Technology Committee enquiry into the Draft Spaceflight Bill:
 https://www.parliament.uk/business/committees/committees-a-z/commons-select/science-and-technology-committee/inquiries/parliament-2015/inquiry10/
- Report from the House of Lords Delegated Powers and Regulatory Reform Committee on the draft Spaceflight Bill
 - https://publications.parliament.uk/pa/ld201719/ldselect/lddelreg/10/1002.htm
- The Constitution Committee report on the Space Industry Bill
 https://publications.parliament.uk/pa/ld201719/ldselect/ldconst/18/18.pdf

Annex A - Territorial extent and application in the United Kingdom

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?
Sections 1-72	Yes, except as provided for in section 71(3).	Yes, except as provided for in section 71(3).	Yes, except as provided for in section 71(3).	Yes, except as provided for in section 71(2).
Schedules 1-12	Yes, subject to section 71(4).			

Annex B - Hansard References

312 The following table sets out the dates and Hansard references for each stage of the Act's passage through parliament.

Stage	Date	Hansard Reference
House of Lords		
Introduction	27 June 2017	Vol. 783 Col. 296
Second Reading	12 July 2017	Vol. 783 Col. 1242
Grand Committee	16 October 2017	Vol. 785 Col. 403
	18 October 2017	Vol. 785 Col. 628
	23 October 2017	Vol. 785 Col. 771
Report Stage	14 November 2017	Vol. 785 Col. 1940
Third Reading	28 November 2017	Vol. 787 Col. 611
House of Commons		
Introduction	29 November 2017	No debate
Second Reading	15 January 2018	Vol. 634 Col. 648
Public Bill Committee	23 January 2018	<u>Col. 1</u>
		<u>Col. 25</u>
Report and Third Reading	6 February 2018	Vol. 635 Col. 1393
Lords Consideration of Commons Amendments	27 February 2018	Vol. 789 Col. 596
Royal Assent	15 March 2018	Vol. 789 Col. 1757

Annex C - Progress of Act Table

313 This Annex shows how each section and Schedule of the Act was numbered during the passage of the Bill through Parliament.

Section of the Act	Bill as Introduced in the Lords	Bill as amended in Committee in the Lords	Bill as amended in Report in the Lords	Bill as introduced in the Commons	Bill as amended in Committee in the Commons
Section 1	Clause 1	Clause 1	Clause 1	Clause 1	Clause 1
Section 2	Clause 2	Clause 2	Clause 2	Clause 2	Clause 2
Section 3	Clause 3	Clause 3	Clause 3	Clause 3	Clause 3
Section 4	Clause 4	Clause 4	Clause 4	Clause 4	Clause 4
Section 5	Clause 5	Clause 5	Clause 5	Clause 5	Clause 5
Section 6	Clause 6	Clause 6	Clause 6	Clause 6	Clause 6
Section 7	Clause 7	Clause 7	Clause 7	Clause 7	Clause 7
Section 8	Clause 8	Clause 8	Clause 8	Clause 8	Clause 8
Section 9	Clause 9	Clause 9	Clause 9	Clause 9	Clause 9
Section 10	Clause 10	Clause 10	Clause 10	Clause 10	Clause 10
Section 11					Clause 11
Section 12	Clause 11	Clause 11	Clause 11	Clause 11	Clause 12
Section 13	Clause 12	Clause 12	Clause 12	Clause 12	Clause 13
Section 14	Clause 13	Clause 13	Clause 13	Clause 13	Clause 14
Section 15	Clause 14	Clause 14	Clause 14	Clause 14	Clause 15
Section 16	Clause 15	Clause 15	Clause 15	Clause 15	Clause 16
Section 17	Clause 16	Clause 16	Clause 16	Clause 16	Clause 17
Section 18	Clause 17	Clause 17	Clause 17	Clause 17	Clause 18
Section 19	Clause 18	Clause 18	Clause 18	Clause 18	Clause 19
Section 20	Clause 19	Clause 19	Clause 19	Clause 19	Clause 20
Section 21	Clause 20	Clause 20	Clause 20	Clause 20	Clause 21
Section 22	Clause 21	Clause 21	Clause 21	Clause 21	Clause 22
Section 23	Clause 22	Clause 22	Clause 22	Clause 22	Clause 23
Section 24	Clause 23	Clause 23	Clause 23	Clause 23	Clause 24
Section 25	Clause 24	Clause 24	Clause 24	Clause 24	Clause 25
Section 26	Clause 25	Clause 25	Clause 25	Clause 25	Clause 26
Section 27	Clause 26	Clause 26	Clause 26	Clause 26	Clause 27
Section 28	Clause 27	Clause 27	Clause 27	Clause 27	Clause 28
Section 29	Clause 28	Clause 28	Clause 28	Clause 28	Clause 29
Section 30	Clause 29	Clause 29	Clause 29	Clause 29	Clause 30
Section 31	Clause 30	Clause 30	Clause 30	Clause 30	Clause 31

Section of the Act	Bill as Introduced in the Lords	Bill as amended in Committee in the Lords	Bill as amended in Report in the Lords	Bill as introduced in the Commons	Bill as amended in Committee in the Commons
Section 32	Clause 31	Clause 31	Clause 31	Clause 31	Clause 32
Section 33	Clause 32	Clause 32	Clause 32	Clause 32	Clause 33
Section 34	Clause 33	Clause 33	Clause 33	Clause 33	Clause 34
Section 35	Clause 34	Clause 34	Clause 34	Clause 34	Clause 35
Section 36	Clause 35	Clause 35	Clause 35	Clause 35	Clause 36
Section 37	Clause 36	Clause 36	Clause 36	Clause 36	Clause 37
Section 38	Clause 37	Clause 37	Clause 37	Clause 37	Clause 38
Section 39	Clause 38	Clause 38	Clause 38	Clause 38	Clause 39
Section 40	Clause 39	Clause 39	Clause 39	Clause 39	Clause 40
Section 41	Clause 40	Clause 40	Clause 40	Clause 40	Clause 41
Section 42	Clause 41	Clause 41	Clause 41	Clause 41	Clause 42
Section 43	Clause 42	Clause 42	Clause 42	Clause 42	Clause 43
Section 44	Clause 43	Clause 43	Clause 43	Clause 43	Clause 44
Section 45	Clause 44	Clause 44	Clause 44	Clause 44	Clause 45
Section 46	Clause 45	Clause 45	Clause 45	Clause 45	Clause 46
Section 47	Clause 46	Clause 46	Clause 46	Clause 46	Clause 47
Section 48	Clause 47	Clause 47	Clause 47	Clause 47	Clause 48
Section 49	Clause 48	Clause 48	Clause 48	Clause 48	Clause 49
Section 50	Clause 49	Clause 49	Clause 49	Clause 49	Clause 50
Section 51	Clause 50	Clause 50	Clause 50	Clause 50	Clause 51
Section 52	Clause 51	Clause 51	Clause 51	Clause 51	Clause 52
Section 53	Clause 52	Clause 52	Clause 52	Clause 52	Clause 53
Section 54	Clause 53	Clause 53	Clause 53	Clause 53	Clause 54
Section 55	Clause 54	Clause 54	Clause 54	Clause 54	Clause 55
Section 56	Clause 55	Clause 55	Clause 55	Clause 55	Clause 56
Section 57	Clause 56	Clause 56	Clause 56	Clause 56	Clause 57
Section 58	Clause 57	Clause 57	Clause 57	Clause 57	Clause 58
Section 59	Clause 58	Clause 58	Clause 58	Clause 58	Clause 59
Section 60	Clause 59	Clause 59	Clause 59	Clause 59	Clause 60
Section 61	Clause 60	Clause 60	Clause 60	Clause 60	Clause 61
Section 62	Clause 61	Clause 61	Clause 61	Clause 61	Clause 62
Section 63	Clause 62	Clause 62	Clause 62	Clause 62	Clause 63
Section 64	Clause 63	Clause 63	Clause 63	Clause 63	Clause 64
Section 65	Clause 64	Clause 64	Clause 64	Clause 64	Clause 65
Section 66	Clause 65	Clause 65	Clause 65	Clause 65	Clause 66

Section of the Act	Bill as Introduced in the Lords	Bill as amended in Committee in the Lords	Bill as amended in Report in the Lords	Bill as introduced in the Commons	Bill as amended in Committee in the Commons
Section 67	Clause 66	Clause 66	Clause 66	Clause 66	Clause 67
Section 68	Clause 67	Clause 67	Clause 67	Clause 67	Clause 68
Section 69	Clause 68	Clause 68	Clause 68	Clause 68	Clause 69
Section 70	Clause 69	Clause 69	Clause 69	Clause 69	Clause 70
Section 71	Clause 70	Clause 70	Clause 70	Clause 70	Clause 71
Section 72	Clause 71	Clause 71	Clause 71	Clause 71	Clause 72
Schedule 1	Schedule 1	Schedule 1	Schedule 1	Schedule 1	Schedule 1
Schedule 2	Schedule 2	Schedule 2	Schedule 2	Schedule 2	Schedule 2
Schedule 3	Schedule 3	Schedule 3	Schedule 3	Schedule 3	Schedule 3
Schedule 4	Schedule 4	Schedule 4	Schedule 4	Schedule 4	Schedule 4
Schedule 5	Schedule 5	Schedule 5	Schedule 5	Schedule 5	Schedule 5
Schedule 6	Schedule 6	Schedule 6	Schedule 6	Schedule 6	Schedule 6
Schedule 7	Schedule 7	Schedule 7	Schedule 7	Schedule 7	Schedule 7
Schedule 8	Schedule 8	Schedule 8	Schedule 8	Schedule 8	Schedule 8
Schedule 9	Schedule 9	Schedule 9	Schedule 9	Schedule 9	Schedule 9
Schedule 10	Schedule 10	Schedule 10	Schedule 10	Schedule 10	Schedule 10
Schedule 11	Schedule 11	Schedule 11	Schedule 11	Schedule 11	Schedule 11
Schedule 12	Schedule 12	Schedule 12	Schedule 12	Schedule 12	Schedule 12

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