

UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND**National mechanism:**

Outer Space Act 1986 (OSA)

Description:

The Outer Space Act is the legal basis for the regulation of activities in outer space (including the launch and operation of space objects) carried out by persons connected with the United Kingdom. The Act confers licensing and other powers on the Secretary of State acting through the UK Space Agency. The Act ensures compliance with UK obligations under the international conventions covering the use of outer space to which the UK is a signatory.

Under the legislation of the OSA, the Secretary of State shall not grant a licence unless he is satisfied that the activities authorised by the licence will not jeopardise public health or the safety of persons or property, will be consistent with the international obligations of the United Kingdom, and will not impair the national security of the United Kingdom. Further the Secretary of State requires the licensee to conduct his operations in such a way as to prevent the contamination of outer space or adverse changes in the environment of the Earth, and to avoid interference with activities of others in the peaceful exploration and use of outer space.

The Secretary of State requires the licensee to insure himself against liability incurred in respect of damage or loss suffered by third parties, in the United Kingdom or elsewhere, as a result of the activities authorised by the licence. Further the licensee shall indemnify Her Majesty's government in the United Kingdom against any claims brought against the government in respect of damage or loss arising out of activities carried on by him to which this Act applies.

The OSA provides the necessary regulatory oversight to: consider public health and safety, and the safety of property; to evaluate the environmental impact of proposed activities; to assess the implications for national security and foreign policy interests; and to determine financial responsibilities and international obligations.

Within the OSA framework, safety evaluation aims to determine whether an applicant can safely conduct the launch of the proposed launch vehicle(s) and any payload. Because the licensee is responsible for public safety, it is important that the applicant demonstrate an understanding of the hazards involved and discuss how the operations will be performed safely. There are a number of technical analyses, some quantitative and some qualitative, that the applicant must perform in order to demonstrate that their commercial launch operations will pose no unacceptable threat to the public. The quantitative analyses tend to focus on the reliability and functions of critical safety systems, and the hazards associated with the hardware, and the risk those hazards pose to public property and individuals near the launch site and along the flight path, to satellites and other on-orbit spacecraft. The qualitative analyses focus on the organisational attributes of the applicant such as launch

safety policies and procedures, communications, qualifications of key individuals, and critical internal and external interfaces.

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In assessing a mission proposed by a licence applicant, UK Space Agency assessors exploit references to the protection of public health or the safety of persons or property, the prevention of the contamination of outer space or adverse changes to the environment of the Earth, and the avoidance of interference with activities of others in order to reflect current best practices relating to space debris mitigation. Accordingly, during the safety review, applicants will be obliged to demonstrate compliance/conformance with existing norms/best practices in relation to measures such as the IADC Space Debris Mitigation Guidelines, Space Debris Mitigation Guidelines of the Committee, and the growing body of international standards relating to debris.

Applicability:

OSA is a mandatory, statutory instrument applying to UK nationals (i.e. personal rather than territorial).

Relation to international mechanisms:

In performing analysis of licence applications, compliance with the requirements identified in the following documents are evaluated and will determine whether a licence will be issued or otherwise:

- Space Debris Mitigation Guidelines of the Committee
- IADC Space Debris Mitigation Guidelines
- ITU Recommendation ITU-R S.1003
- ISO Standards (24113: Space Systems – Space Debris Mitigation Requirements; and others)

Link to other national mechanisms:

None.

References:

- <http://www.bis.gov.uk/uk-space-agency/what-we-do/space-and-the-growth-agenda/uk-capabilities-for-overseas-markets/the-outer-space-act-1986>