



UK's Outer Space Act - 30 Years On

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Outline

- **Brief overview of the Outer Space Act**
- **Licensing Process**
- **Compliance and Monitoring**
- **Reforms**
- **Future Challenges**

UK Outer Space Act 1986

- Legislation addressing the UK's obligations under the international space treaties:
 - Outer Space Treaty (1967)
 - Rescue Agreement (1968)
 - Liability Convention (1972)
 - Registration Convention (1975)
- Enacted to ensure compliance with our international obligations in respect of private activities.

UK Outer Space Act 1986

- Confers licensing powers on the Secretary of State.
- S1 covers application of the Act – A licence is required by a UK national or company engaging in:
 - Launching or procuring the launch of a space object.
 - Operating a space object.
 - Any activity in outer space.

UK Outer Space Act 1986

Generally:

- Section 3 deals with UK's obligation to supervise and authorise space activity – prohibits unlicensed UK activity in outer space.
- Section 5 deals with supervision by way of a licence and licence conditions.
- Section 6 allows for the transfer, variation, suspension or termination of a licence.
- Section 7: UK to keep a registry of space objects
- Sections 8 & 9: Powers to deal with unlicensed activity.

UK Outer Space Act 1986

- Section 11 allows for the Secretary of State to make regulations within the powers conferred by the Act.
- These can be brought into force by a statutory instrument. Any regulations would need to be scrutinised by Parliament.
- Example: Current Fees Regulations.

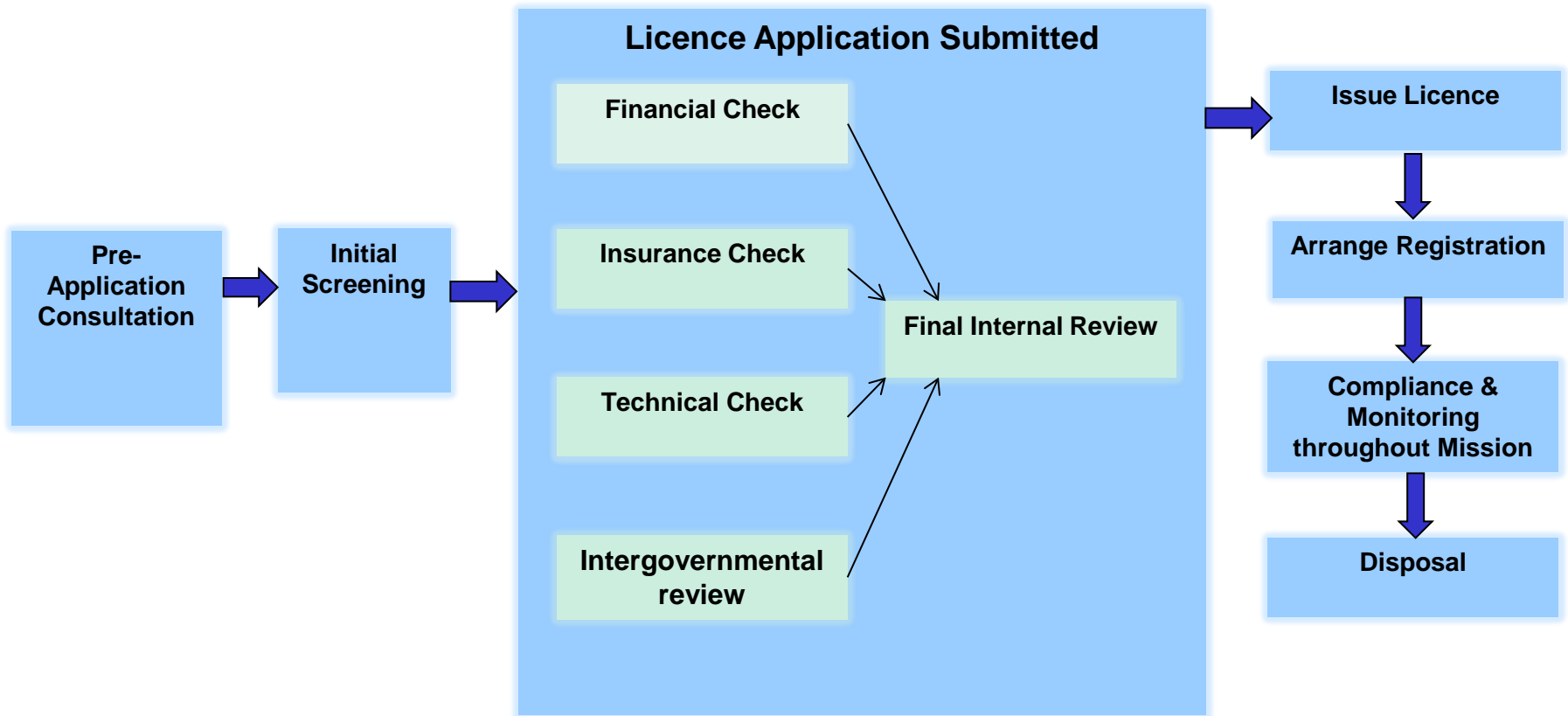
UK Outer Space Act 1986

- Section 5(1) also gives power to the Secretary of State to include conditions in licences.
- Permitting inspection.
- Licensee to provide information.
- Obtain advanced approval for any changes to licensed activity.
- Requiring insurance.
- Governing disposal of the satellite.
- Avoid any breach of UK's international obligations.

Licensing Authority (UKSA)

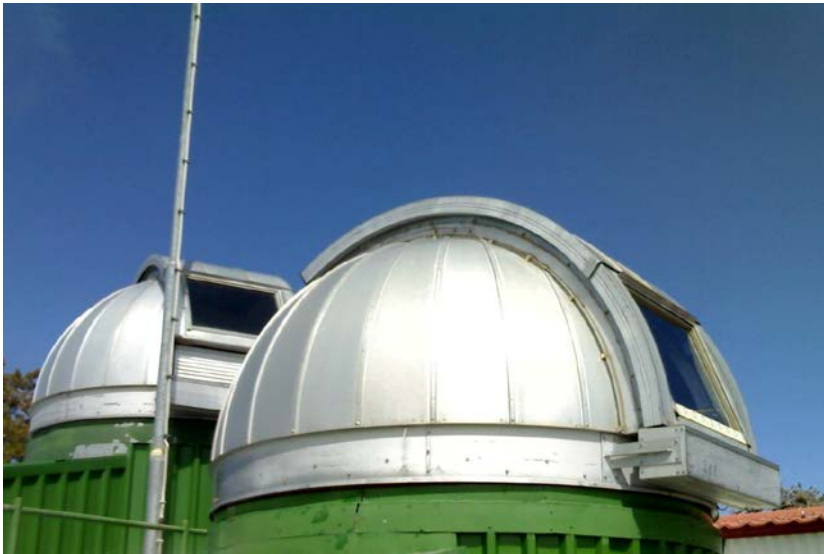
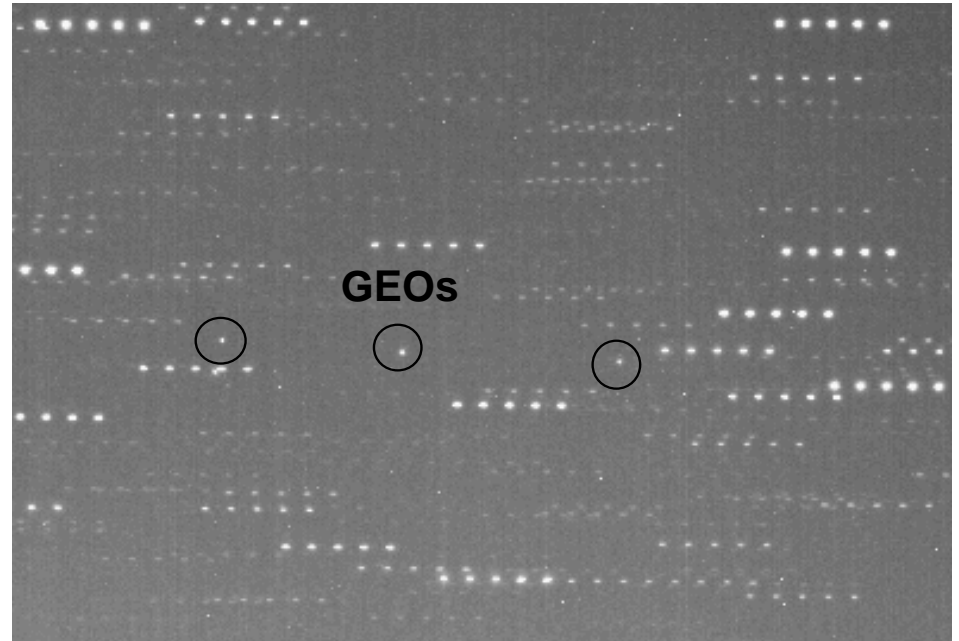
- **Secretary of State shall not grant a licence unless he is satisfied that the activities authorised by the licence will:**
 - not jeopardise public health or the safety of persons or property.
 - will be consistent with the international obligations of the United Kingdom.
 - will not impair the national 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.
 - avoid adverse changes in the environment of the Earth.
 - avoid interference with activities of others in the peaceful exploration and use of outer space.

Licensing Process



Compliance and Monitoring

- Annual Insurance Review
- Annual Health Check
- Monitoring



Reform of the Outer Space Act

- **Previously S10 – unlimited indemnity placed on Licensees.**
- **The Outer Space Act amended by the Deregulation Act - a limit to be placed on the Licensee's liability within licence.**
- **For standard missions - limit is expected to be set at 60 million euros - in line with insurance requirement.**
- **Only applies to licensed activities.**
- **Came into force on 1 October 2015.**
- **For licences issued prior to 1 October 2015 – Licensees can apply to have their liability capped.**

Future Challenges

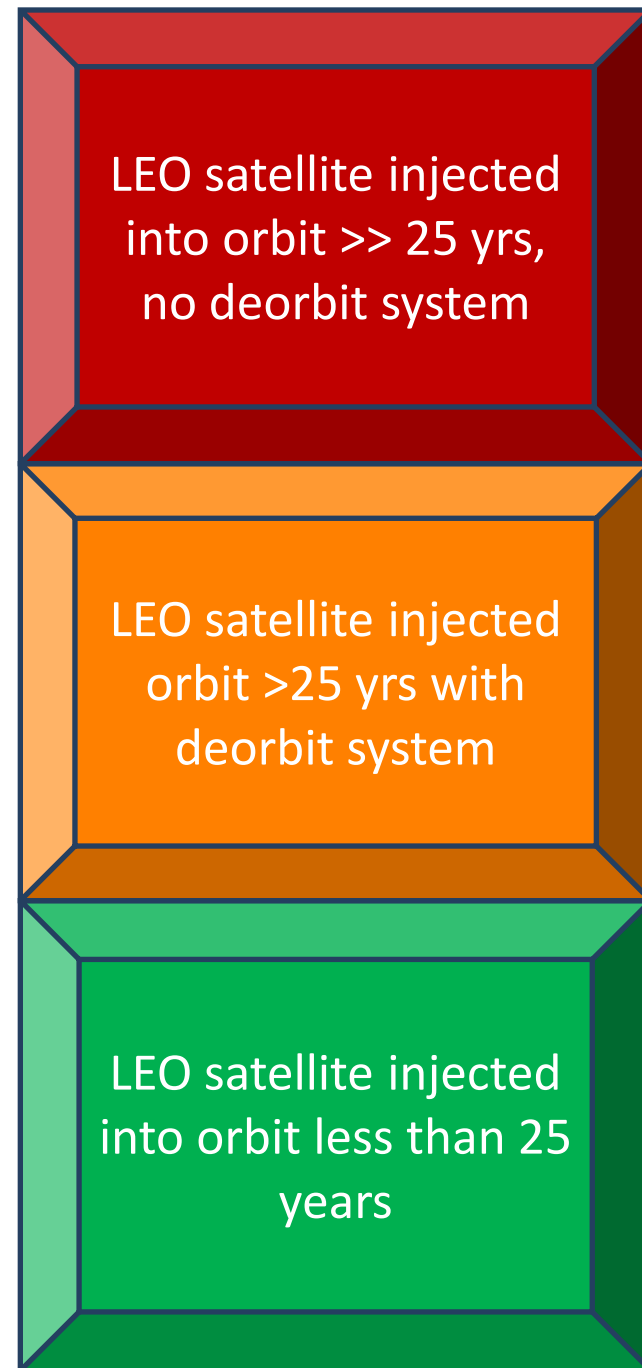
- **Cubesats / small satellites.**
- **UK Spaceport and suborbital vehicles.**
- **Mega Constellations and Insurance Requirements.**

Cubesats / Small Satellites

- **Present their own unique issues:**
 - **New entrants to the space industry.**
 - **Congested area of space.**
 - **Secondary payloads.**
 - **Reduced capability for tracking and manoeuvre.**
- **Aim – assist industry by encouraging safe and sustainable missions.**
- **Traffic Light System**

Traffic Light Regime

- “Traffic light” regime will give applicant an idea as to the likelihood of receiving a licence.
- **Green Rated Mission:**
 - Possibility of a reduced assessment.
 - Possibility of reduced fee.
 - Possibility of waiving TPL in orbit insurance.
- Are cubesats a special case?



UK Spaceport

- **The UK Government's National Space Policy sets out the ambition to establish a spaceport in the UK.**
- **As part of a cross governmental programme, we are examining the case for commercial spaceflight and small satellite launch activities.**
- **Initial emerging technical requirements were published on the Department for Transport's website in December 2015 following a technical briefing for potential UK spaceport locations on 6 November 2015.**
- **Our current focus is on developing our understanding of the technical and regulatory requirements – this is difficult and complex work, involving liaison with various organisations, here and in the USA. Our aim is to launch the process in 2016.**

Dealing with Mega Constellations

- **UK Space Agency exploring the approach to dealing with mega constellations.**
- **Possible to licence under current regime but likely to require more in depth assessments and analysis.**
- **TPL Insurance requirement is a concern for industry – currently exploring possible insurance options for satellite fleets and constellations.**

Conclusion

- **Outer Space Act still provides effective method of supervising and authorising UK space activity.**
- **Allows the UK Space Agency on behalf of the Secretary of State to include conditions within licences to ensure compliance with the UN treaties.**
- **Allows for a mechanism of further regulations if considered necessary as part of secondary legislation.**
- **Will continue to review its relevance and continue to use it as a vehicle for following international best practice.**

More Information

www.gov.uk/government/organisations/uk-space-agency

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