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

1. Pre-Application Consultation
2. Initial Screening
3. Licence Application Submitted
   - Financial Check
   - Insurance Check
   - Technical Check
   - Intergovernmental review
4. Final Internal Review
5. Issue Licence
6. Arrange Registration
7. Compliance & Monitoring throughout Mission
8. Disposal
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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