

# LAUNCH UK

A rocket launch is depicted against a starry night sky. The rocket is a vertical column of white smoke and fire, ascending from a green, hilly landscape. The sky is a deep blue and purple, with a prominent green aurora visible in the center. The overall scene is a composite image used for a presentation slide.

Orbital Licensing Plenary  
Virtual meeting | 25 March 2021



# Agenda

**LAUNCH**  
UK

**10:00**    **Welcome and Introduction**

Sarah Boyall | UK Space Agency

**10:05**    **Space Industry Act Orbital Licensing Regime and applicable regulations**

Thierry Berns and Leanne Chhen | UK Space Agency

**10:35**    **Q & A**

**10:50**    **Closing Remarks**

# Aims of the plenary

- Provide an overview of the orbital licensing process under the Space Industry Act 2018
- Provide clarification on the differences between the new Space Industry Act and the Outer Space Act 1986 licensing regimes and to provide further information on which regulations apply to the orbital community.

*The small print: No part of the discussions held (unless otherwise noted) should be taken as a reflection of developing our future government policy or legislation, and any decisions taken by any individual or organisation on the basis of any information they hear or see at these meetings are taken at their own risk*



# Housekeeping

- Please type your question into the meeting chat. We will go through these at the end and try to address as many as possible.
- Please mute your microphones and turn off your video during the session. We may ask you to turn these on during your questions if you wish to follow up.
- We are recording this session and by continuing to participate in this session your agreement is inferred.
- The slides will be made available after the plenary.



# LAUNCH UK

A rocket launch is depicted against a night sky filled with stars and a vibrant green aurora. The rocket's trail of white smoke and fire extends from the horizon to the top of the frame. The foreground shows a dark, silhouetted landscape with rolling hills.

Orbital Licensing

Thierry Berns and Leanne Chhen | UK Space Agency

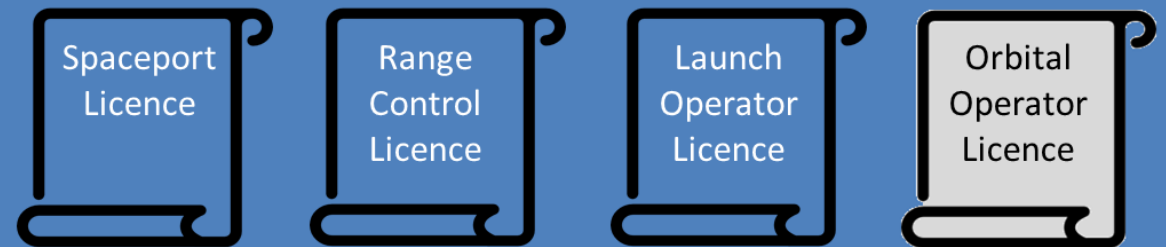
# Which Activities are Covered by the Orbital Licensing Regime?

Space Activities carried out...	... in the United Kingdom	... Overseas
... by UK Nationals	SIA 2018*	OSA 1986
... by Foreign Parties	SIA 2018	N/A

\* Space Activities carried out by UK nationals in the UK will previously have been licensed under the Outer Space Act 1986.

An SIA Orbital Operator Licence will be required to:

- procure the UK launch of a satellite;
- operate a satellite from the UK; and
- carry out any other activity in outer space



It will be an offence for a person to whom the Act applies to carry out such an activity without a licence.



# Guiding Principles

## Duties of the Space Regulator

The Regulator's primary remit, under the SIA, will be in relation to safety.

- Safety extends to both persons and property
- Safety applies both in orbit and on the ground

However, in exercising its orbital licensing functions, the Regulator will also have regard to:

- National Security; and
- The UK's International Commitments, including those on the responsible use of space

## Regulatory Alignment

- The SIA orbital regime will be closely aligned to the existing orbital regime under the OSA.
- Alignment ensures level and fair treatment between OSA and SIA licensees.
- Alignment also provides continuity and coherence for licensees operating across regimes.



# The SIA Orbital Operator Licence

## Spaceflight Activities

- The licence will authorise activities related to:

(i) Procurement to Launch; and/or\*

(ii) Operation of a Space Object

\*dependent upon whether one or both activities are being carried out from the UK

## Conditions

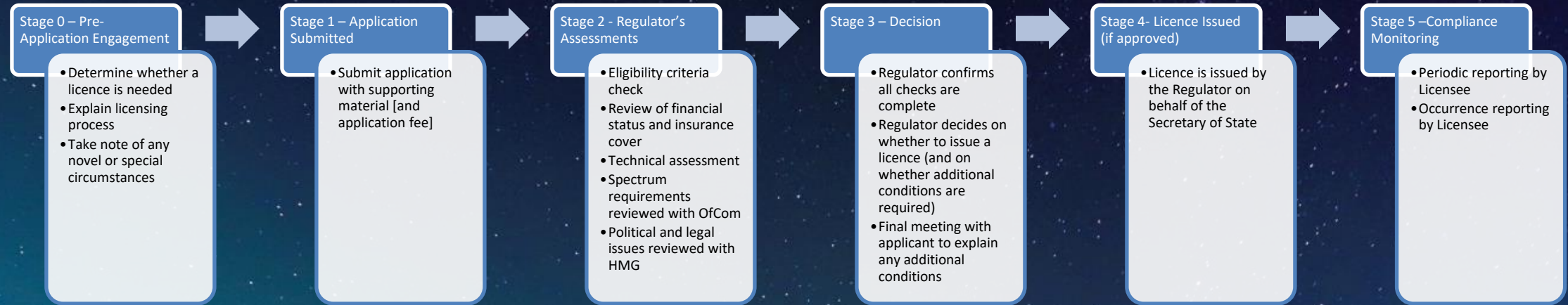
- The authorised activities will be subject to licence conditions.
- These will include **standard licence conditions** which will apply to all missions (e.g. liability conditions).
- However, the Secretary of State may also include **additional licence conditions**, which will address matters specific to the mission being authorised (e.g. specific to a constellation mission).





# Orbital Licensing

## The Licensing Process



- Early engagement with the Regulator is encouraged to discuss the licensing process and take note of any novel or special circumstances which may apply (Stage 0)
- The application triggers the formal licensing process (Stages 1-4)
- This is an iterative process – the Regulator will assess the information provided in the initial application, but may request further information or clarification from the applicant
- Licensees will be subject to periodic reporting and occurrence reporting, where the latter materially affects safety or security.



# The Traffic Light System

- Interactive pre-application process provided to prospective applicants
- Optional and free of charge
- Consists of a series of about 10 questions about the applicant's business and the proposed spaceflight activities.
- Based on those answers, the regulator will give prospective licence applicants a pre-application **Red/Amber/Green** rating and basic feedback.
- The ratings are an early, non-binding and approximate indication of the potential level of risk to safety, security and sustainability of the proposed orbital activity – ratings do not pre-determine the outcome of an application.



# Space Industry Regulations - overview

General areas of the Regulations that apply to orbital operators:

- Grant of a licence
  - Includes eligibility criteria, prescribed roles and how to apply for a licence
- Security
- Liabilities and indemnities
- Monitoring and enforcement
- Miscellaneous (duty to inform the Regulator of changes)

The orbital guidance lists the regulations that apply to orbital operators.



# Operator assessments

Three broad areas:

1. Eligibility criteria – more information on this in the next slide
2. The applicant's legal status
  - e.g. company structure, nationality of directors
3. Evidence of applicant's financial and technical resources
  - e.g. business plan

The information required for each of these areas is listed in the Regulator's Licensing Rules.



# Eligibility criteria

- Under regulation 6, a person will not be eligible if that person:
  - a) An undischarged bankrupt
  - b) There is a bankruptcy restriction order/undertaking
  - c) There is a debt relief restrictions order, undertaking or moratorium in force against that person
  - d) Has been disqualified from being a director of a company
  - e) Has been convicted of any offence involving fraud or dishonesty
- Eligibility criteria apply to 'officers' of a licensee . The SIA defines officers to be 'a director, manager, secretary or other similar officer'.
- In addition, the regulator must be satisfied that the applicant and relevant individuals are 'fit and proper persons' to carry out the relevant activities.



# Safety, security and sustainability assessments

- Assessment questionnaire specifically relating to safety, security, sustainability.
- Safety questions cover:
  - Space segment
  - Operations
  - Ground segment
  - Launch
- General principles around how the Regulator will assess orbital applications is in the 'Assessment Principles' section of the guidance for orbital operators.



# Information required for orbital applications

- Application form, including answers to the Assessment Questions
- Other information requirements set out in the Regulator's Licensing Rules in Table A and Table D
- Similar to OSA applications, the Regulator will review the initial information provided to understand the mission and identify any areas of concern or areas where it may require more information



# Prescribed roles

- All orbital operators will require an accountable manager
- Where the regulator identifies national security issues from proposed activities, an orbital operator will also require a security manager
- When a security manager is required, the further security requirements under the Regulations apply.

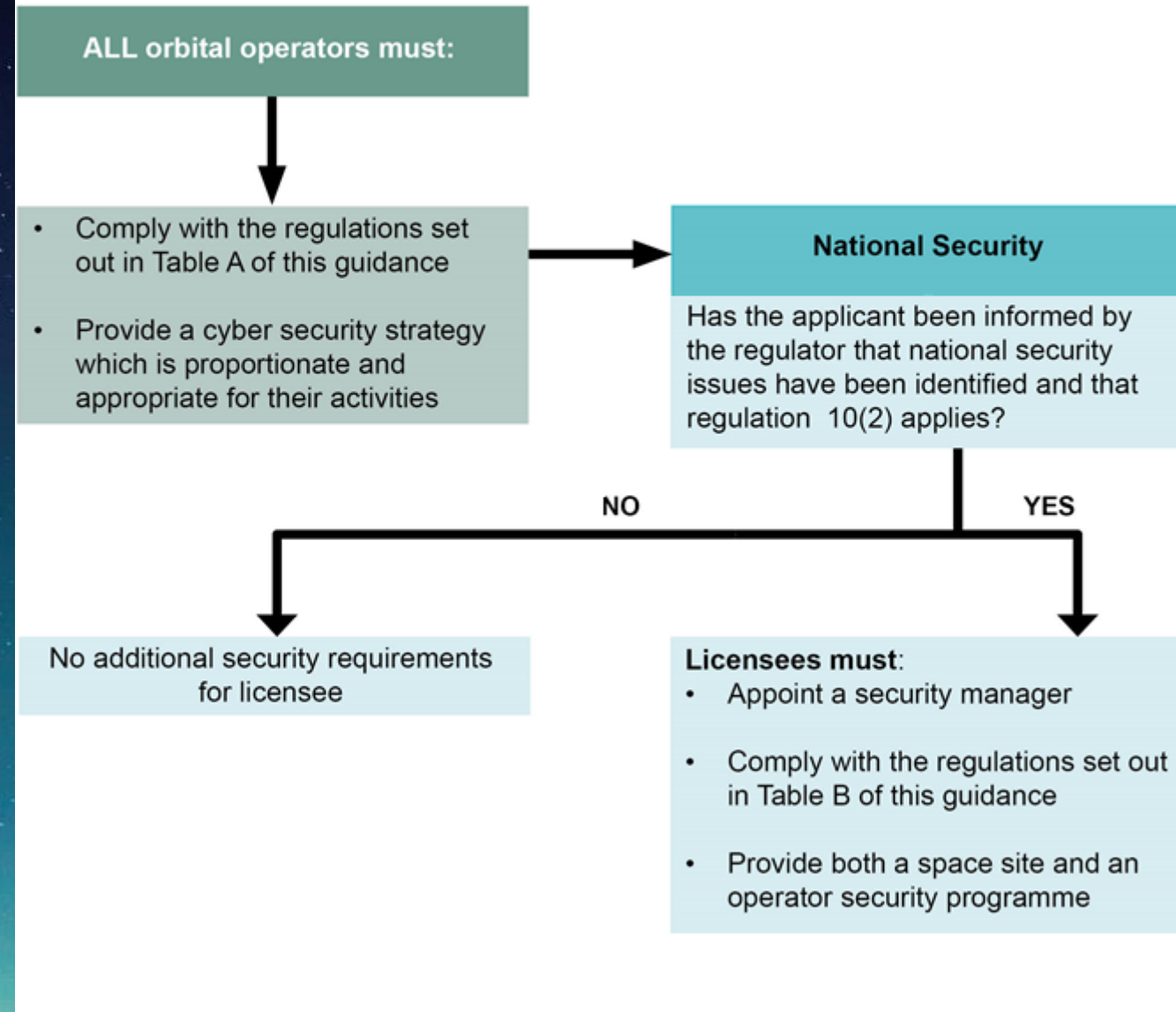


# Security requirements

- Security requirements for spaceflight operations should be applied in a manner that is appropriate to the activity being undertaken and proportionate to the risks entailed.
- These should be based on a security risk assessment for the space site and operation taking place.
- Therefore, what will be appropriate and proportionate for one activity may be very different from what is appropriate and proportionate for another.



# Orbital operator Security





# OSA and SIA at a Glance

	OSA Licensing Regime (To Date)*	SIA Licensing Regime
General Approach	Outcome-based / Non-prescriptive	Outcome-based / Non-prescriptive
Licensing Process	<ul style="list-style-type: none"> <li>- Optional Pre-Application (incl. optional TLS)</li> <li>- Formal Application</li> <li>- Monitoring &amp; Compliance of Licensed Activities</li> </ul>	<ul style="list-style-type: none"> <li>- Optional Pre-Application (incl. optional TLS)</li> <li>- Formal Application</li> <li>- Monitoring &amp; Compliance of Licensed Activities</li> </ul>
Fees	£6,500 per licence (fee adjustments may apply for constellations) <b>General Educational Exemption (planned alignment to SIA)</b>	£6,500 per licence (fee adjustments may apply for constellations) <b>Case-by-Case Exemption</b>
Liabilities	Limited at €60m for orbital operations	Limited at €60m for orbital operations <b>Orbital Operator Liability for Launch limited to MIR</b> <b>S.34 strict liability rights of claim for damage in the UK</b>
Corporate Checks	Company Only	<b>Company and Key Individuals ("Fit &amp; Proper Persons" Checks and Eligibility Criteria)</b>
Prescribed Roles	N/A	<b>Accountable Manager</b> <b>Security Manager (where applicable)</b>
Safety Reqs.	Safety Assessment Questions	Safety Assessment Questions
Security Reqs.	Security Check	<b>Security Assessment Questions</b> <b>Security Requirements for Space Sites (e.g. MMFs)</b> <b>Security Requirements for Security Manager</b> <b>Cybersecurity Strategy</b>
Spectrum Reqs.	Ofcom Check	Ofcom Check

\*Extant differences in the OSA Regime will be subject to review as part of the OSA-SIA alignment process



**LAUNCH**  
UK



# Questions?

