

Licence ref: **SR-APP-001002**



**Oversight and Monitoring Plan v.1.0**

for

**Virgin Orbit, LLC**

In relation to its Spaceflight Operator Licence

Issued to

**Virgin Orbit, LLC**

On

**20 December 2022**

## **1. SCOPE AND PURPOSE**

- 1.1 This Oversight and Monitoring Plan (“the OMP”) sets out reporting requirements for **Virgin Orbit, LLC** (“the Licensee”) to support the Regulator’s oversight and monitoring of the activities permitted by the **Spaceflight Operator Licence** granted to the Licensee (“the Licence”). The OMP must be read with and in light of the terms and conditions of the Licence, the Act and the Regulations.
- 1.2 The definitions used within the Licence, the Act and the Regulations are adopted in this OMP.
- 1.3 The OMP may be updated by the Regulator from time to time during the period of the Licence. The Regulator will inform the Licensee prior to any amendment. Whenever the OMP is updated, a copy of the amended OMP will be provided to the Licensee.
- 1.4 The Regulator’s monitoring and enforcement powers set out at Part 14 of the Regulations and in section 26 of the Act, and the Licensee’s obligations under that Part, as well as under any other Part of the Regulations that applies to the Licensee, are not affected by this OMP. Where necessary, this may include the provision of further information from the Licensee, beyond what is specified in the OMP.
- 1.5 The Regulator may take enforcement action based on the results of our monitoring and oversight activities if necessary.
- 1.6 Guidance in relation to the Regulator’s monitoring powers and requirements can be found on the Regulator’s website.
- 1.7 The Regulator is not bound by the terms of this OMP and may take other action as it thinks appropriate. In particular, the Regulator will maintain a programme of oversight, and will notify the Licensee in advance of any planned oversight under this programme. The Regulator will endeavour to provide details as soon as possible, but advance notice may be limited if any unplanned oversight is required under the Regulator’s monitoring and enforcement powers set out at Part 14 of the Regulations.
- 1.8 Where the Licensee is also the current Range Control Licence holder, (which includes an accompanying Range Control Oversight and Monitoring Plan referred to within that licence), duplicate notifications, information and evidence listed in both this OMP and the Range Control Oversight and Monitoring Plan do not need to be provided to the Regulator, where such information would be identical. Where this is the case, the Licensee must clearly mark all notifications, information and evidence to state whether they apply to spaceflight activities, range control services, or both spaceflight activities and range control services.

## **2. NOTIFICATIONS AND INFORMATION REQUIRED TO BE PROVIDED TO THE REGULATOR – PRE-LAUNCH**

- 2.1. The Licensee must provide the following documents, information and evidence to the Regulator for its review no less than **60** days before the intended Launch Window (or as agreed in writing by the Regulator):
  - 2.1.1. information on the details of the planned launch, including mission and payload information, flight safety analysis, and the launch campaign timetable;
  - 2.1.2. confirmation of the radio frequencies to be used in the carrying out of the Licensed Activities and evidence that the Licensee has been granted the appropriate Office of Communications (OFCOM) radio frequency licences, or other radio frequency licence if the radio frequency used is not under UK jurisdiction; and

- 2.1.3. evidence that the Licensee maintains the financial resources to do the things authorised by the Licence, including a copy of the Licensee's most recent internal management accounts for their business and financial forecast covering up to and including the period during which Licensed Activities are to have been completed.
- 2.2. The Licensee must provide to the Regulator for its review confirmation of the intended Launch Window and launch trajectory, as soon as reasonably practicable after it becomes available but no less than **4 weeks** in advance of the intended Launch Window (or as agreed in writing by the Regulator). This is to enable the Regulator to facilitate the issue of a notification under the Hague Code of Conduct against Ballistic Missile Proliferation (HCoC).
- 2.3. The Licensee must provide to the Regulator for its review confirmation of which payloads are to be launched and evidence that each payload has met the technical requirements of the Launch Vehicle, no less than **7 days** before the intended Launch Window (or as agreed in writing by the Regulator).
- 2.4. The Licensee must provide the following documents, information and evidence to the Regulator for its review as soon as reasonably practicable after these become available, but prior to the intended Launch Window:
  - 2.4.1. evidence that a Federal Aviation Administration - Office of Commercial Space Transportation licence is in place for each launch, as required under Licence condition 3.1.6;
  - 2.4.2. evidence prior to a launch taking place that the Licensee's Flight permits from the Regulator and the Federal Aviation Administration for the carrier aircraft Cosmic Girl are in place, remain applicable and valid;
  - 2.4.3. evidence that a Marine Management Organisation (MMO) marine licence under the Marine and Coastal Access Act 2009 has been granted;
  - 2.4.4. evidence that the Licensee has completed appropriate Launch Collision Avoidance analysis and determined Closures; and
  - 2.4.5. a copy of the insurance certificate, the signed policy wording, the schedule of security, any amendments or endorsements to the policy and such other information relevant to that insurance that the Regulator may require.
- 2.5. "Launch Window" means the time periods during which an intended launch is projected to take place by the Licensee.
- 2.6. "Closures" means the time periods during which a launch cannot take place due to the risk of collision.

### **3. NOTIFICATIONS AND INFORMATION REQUIRED TO BE PROVIDED TO THE REGULATOR – POST-LAUNCH**

- 3.1. The Licensee must provide to the Regulator within **10 days** of launch a post launch information form, as set out in the Licensee's safety case, providing final orbital parameters of all space objects to enable the Regulator, where appropriate, to:
  - 3.1.1. register details of the launch as required under section 61 of the Act; and
  - 3.1.2. register any objects arising from the Launch which achieve orbit on either the UK Registry of Outer Space Objects and with the United Nations Office for Outer

Space Affairs (UNOOSA), or on the UK Supplementary Registry of Outer Space Objects.

#### **4. NOTIFICATIONS TO BE PROVIDED TO THE REGULATOR – GENERAL**

- 4.1. The Licensee must provide an update to the Regulator in all instances where required by the Regulations, including but not limited to:
  - 4.1.1. a copy of the revised Safety Case is to be provided to the Regulator as required by Regulations 80 – 82;
  - 4.1.2. a copy of the cyber security strategy upon its annual review, as required by Regulation 185;
  - 4.1.3. a copy of the operator security programme upon its annual review, as required by Regulation 171(5); and
  - 4.1.4. a copy of Emergency Response Plan tests and reviews at regular intervals, not exceeding three years, as required by Regulation 104(3).
- 4.2. The Licensee must inform the Regulator in writing as soon as possible of any material change in any of the information provided to the Regulator by or on behalf of the Licensee, whether in or with the application for this Licence or after this Licence has been granted and/or come into effect, as required by Regulation 282(2). Failure to do so may amount to the Licensee committing an offence in accordance with Regulation 283 and may result in penalties in accordance with Regulation 284.
- 4.3. Where the information referred to in paragraph 4.2 above was provided by a person other than the Licensee, the Licensee must inform the Regulator in writing of any material change in that information as soon as possible after the Licensee becomes aware that the information in question was provided to the Regulator and of the change in the information, as required by Regulation 282(3). Failure to do so may amount to the Licensee committing an offence in accordance with Regulation 283 and may result in penalties in accordance with Regulation 284.
- 4.4. The Licensee must notify the Regulator of any Occurrence within 72 hours of the time at which the Licensee became aware of the Occurrence, as required by Regulation 271.
- 4.5. The Licensee must provide the Regulator with written notice of a change of individual undertaking a prescribed role, in advance of the proposed change, as required by Regulation 13(1). Such notice must be accompanied by information about the individual's suitability to carry out the prescribed role, to be provided sufficiently in advance of the proposed change to allow the Regulator to carry out any checks deemed necessary.
- 4.6. The Licensee must provide the following information, by way of annual report to the Regulator, no later than 31 January (or other date agreed in writing by the Regulator) each year the Licence is in force:
  - 4.6.1. calculation of greenhouse gas emissions, including the greenhouse gas emissions for all in-scope launch activities for the preceding calendar year, and the reduction in tonnes of greenhouse gas emissions arising from the purchase of the credits by the Licensee;
  - 4.6.2. methodology for calculation of net greenhouse gas emissions adopted by the Licensee;

- 4.6.3. the name or other means of identification of the offsetting project and a hyperlink to the project documentation;
- 4.6.4. evidence of purchase of the credits by the Licensee (e.g. proof of retirement of offset credits); and
- 4.6.5. the name of the organisation who independently verified the credits purchased by the Licensee.

## **5. REGULATOR APPROVAL/CONSENT REQUIRED**

- 5.1. The Licensee must seek written approval from the Regulator before any change is made to:
  - 5.1.1. the individual holding the role of training manager. The Regulator's approval of an individual to hold the role of training manager will be determined as set out in Regulation 64;
  - 5.1.2. the extent of the responsibilities of the training manager, as required by Regulation 62(5); and
  - 5.1.3. the following matters in the training manual, as required by Regulation 68(2):
    - a) the scope of the training for relevant individuals carried out by or on behalf of the Licensee ("the training");
    - b) the locations where the training is carried out;
    - c) the course structure and training methods adopted for the training;
    - d) the use of instructors in the training;
    - e) the standards of competence set for each role in relation to the Licensed Activities;
    - f) the facilities and equipment used in the training, including the simulated training devices and aircraft where appropriate; and
    - g) the arrangements for medical examinations for crew and spaceflight participants.