
DRAFT STATUTORY INSTRUMENTS

2021 No.

The Space Industry Regulations 2021

PART 5

Grant of a spaceport licence

CHAPTER 1

Interpretation

Interpretation

34. In this Part—

“actual vehicle” means a launch vehicle or carrier aircraft in respect of which there is an operator applicant;

“applicant” means an applicant for a spaceport licence;

“licensed activities” means the activities that a person is authorised to carry out by virtue of a spaceport licence;

“operator applicant” means a person who is applying, has applied or intends to apply for a launch operator licence or a return operator licence to authorise spaceflight activities at the proposed spaceport;

“the proposed spaceport” means the site in respect of which an application for a spaceport licence is being, or has been, made;

“representative vehicle” means a launch vehicle or a carrier aircraft of the type that the applicant considers most likely to be used to carry out spaceflight activities at the proposed spaceport;

“safety case” is to be construed in accordance with regulation 36;

“safety clear zone” means an area which will be subject to restrictions, exclusions and warnings during the carrying out of hazardous pre-flight and post-flight operations;

“siting assessment” means an assessment carried out under regulation 38.

CHAPTER 2

Prescribed criteria and requirements

Grant of a spaceport licence: prescribed criteria for horizontal spaceports

35.—(1) Where the proposed spaceport is a horizontal spaceport, the proposed spaceport must be located at an aerodrome which is—

(a) either—

(i) certified, or

(ii) CAA licensed, and

(b) NASP directed.

(2) For the purposes of this regulation “NASP directed” in relation to an aerodrome means an aerodrome which is subject to the direction of the Secretary of State under sections 12, 13, 13A, 14 and 15 of the Aviation Security Act 1982⁽¹⁾.

Grant of a spaceport licence: safety case requirement

36.—(1) An applicant must carry out a safety case which, unless the circumstances in paragraph (2) apply, meets the requirements in paragraphs (3) to (7).

(2) The circumstances referred to in paragraph (1) are that the applicant’s application is not based on an actual vehicle.

(3) The applicant’s safety case must take into account—

- (a) the interests of any operator applicant,
- (b) the interests of any other known user of the proposed spaceport site, and
- (c) if the proposed spaceport is a horizontal spaceport—
 - (i) the interests of the aerodrome licence holder, and
 - (ii) the interests of any other aerodrome user.

(4) The applicant’s safety case must as a minimum contain the following information—

- (a) a description of the proposed spaceport, including a description of—
 - (i) the licensed activities proposed to be conducted at that spaceport,
 - (ii) the spaceflight activities proposed to be conducted at that spaceport, and
 - (iii) the activities of any other known spaceport user;
- (b) if the proposed spaceport is a horizontal spaceport, a description of the aerodrome;
- (c) a description of the vicinity of the proposed spaceport, including identification of any areas, developments or features which could affect the assessment of risks or hazards or the mitigation measures to be applied in the event of an emergency occurring at the spaceport;
- (d) a plan of the proposed spaceport identifying and showing the proposed location of—
 - (i) any known spaceport infrastructure including runways, taxiways, launch pads, test stands and launch vehicle parking areas,
 - (ii) any proposed physical barrier under regulation 172(2),
 - (iii) any proposed installations including maintenance facilities, integration facilities, hangars or any other buildings,
 - (iv) any proposed hazardous material storage facilities to be designated under regulation 158, including, if known, the types and maximum quantities to be stored at each hazardous material storage facility,
 - (v) any proposed area or buildings for handling or venting of any hazardous material, and
 - (vi) any proposed static engine or other test areas;
- (e) a description of any spaceflight activities which the applicant believes likely to be carried out from the spaceport, including a description of any carrier aircraft or launch vehicle to be launched and any payload to be carried by such an aircraft or vehicle if the spaceport licence is granted, including—
 - (i) any associated infrastructure requirements;

(1) 1982 c. 36.

- (ii) any associated operational requirements, such as integration facilities and hangars;
 - (iii) any operating characteristics which may affect licensed activities;
 - (iv) any rescue and firefighting requirements;
 - (v) any hazardous material to be used by a carrier aircraft, launch vehicle or payload, or to be stored at the spaceport.
- (5) The applicant’s safety case must include, in relation to the operations and activities listed in paragraph (6)—
- (a) identification of each major accident hazard that could arise during the operation or activity,
 - (b) an assessment of the likelihood of it arising and of the severity of the consequences if it does occur, and
 - (c) a description of the prevention and mitigation measures that will be applied to ensure that the risks identified are as low as reasonably practicable.
- (6) The operations and activities to which paragraph (5) refers are—
- (a) the transporting, handling and storing of any hazardous material at the spaceport,
 - (b) the integration of a payload with a launch vehicle at the spaceport,
 - (c) the integration of a carrier aircraft with a launch vehicle at the spaceport,
 - (d) any testing of a type described in regulation 161 (requirement to designate appropriate area for static engine etc. testing) at the spaceport, and
 - (e) any other proposed licensed activities or spaceflight activities which may give rise to a major accident hazard.
- (7) Taking into account the findings of the assessment required under paragraph (5), the applicant’s safety case must, except where regulation 37(2) applies—
- (a) identify that a safety clear zone is required,
 - (b) define the area that will comprise the safety clear zone,
 - (c) stipulate the times that the safety clear zone will be in place,
 - (d) set out the measures the applicant will take to ensure that a safety clear zone is put in place and is monitored, and
 - (e) set out the arrangements the applicant will have in place to ensure that no person, other than a person permitted to be present under regulation 157(3)(d), is inside a safety clear zone.
- (8) Where the circumstances in paragraph (2) apply, the applicant’s safety case must—
- (a) be based on the representative vehicle,
 - (b) take into account the matters listed in paragraph (3), as far as these are known to the applicant,
 - (c) contain as much of the information set out in paragraph (4) as is known to the applicant,
 - (d) include an assessment that meets, as far as possible, the requirements of paragraph (5), and
 - (e) take into account the assessment carried out under sub-paragraph (d), and unless regulation 37(2) applies, as far as possible satisfy the requirements in paragraph (7).
- (9) In this regulation “aerodrome licence holder” means the holder of the CAA licence or aerodrome certificate for the aerodrome at which the proposed horizontal spaceport is to be located in accordance with regulation 35(1).

Grant of a spaceport licence: safety clear zone requirement

37.—(1) An applicant must, unless paragraph (2) applies, show that it will be able to put in place an appropriate safety clear zone to ensure that the risk to any person from blast overpressure, fragmentation debris, thermal radiation or toxic release will be as low as reasonably practicable during any hazardous pre-flight and post-flight operations.

(2) Paragraph (1) does not apply if the safety case demonstrates that a safety clear zone will not be required for the hazardous pre-flight or post-flight operations.

(3) For the purposes of paragraph (1), an appropriate safety clear zone is one that is determined by the assessment made in the applicant’s safety case under regulation 36(7).

Grant of a spaceport licence: siting assessment requirement

38.—(1) An applicant must conduct a siting assessment that meets the requirements in this regulation.

(2) The applicant’s siting assessment must—

- (a) relate to the site of the proposed spaceport,
- (b) subject to paragraph (4), be based on the actual launch vehicle or vehicles, and
- (c) result in a numerical estimate of the annualised risk of death or serious injury to members of the public posed by the spaceflight activities proposed.

(3) The level of risk determined under paragraph (2)(c) must be acceptable to the regulator.

(4) Where the applicant’s application is not based on an actual vehicle, the applicant’s siting assessment must be based on the representative vehicle.

CHAPTER 3

Members of the public

“Members of the public”: prescribed meaning under section 2(7) for the purpose of section 10(a) (grant of a spaceport licence)

39. “Members of the public” for the purpose of the reference to “public safety” in section 10(a) does not include any person who is—

- (a) listed in regulation 40, and
- (b) voluntarily in close proximity to a source of danger at a spaceport.

Persons who are not members of the public

40.—(1) The persons referred to in regulation 39 are—

- (a) an appointee, employee or agent of a licensee;
- (b) a member of the crew who has consented to accept the risks involved in the operator’s spaceflight activities in accordance with section 17 (informed consent);
- (c) a spaceflight participant who has consented to accept the risks involved in the operator’s spaceflight activities in accordance with section 17;
- (d) an individual not falling within sub-paragraphs (a) to (c) who is taking part in the operator’s spaceflight activities;
- (e) an officer or partner of a licensee;
- (f) an individual who is at a spaceport at the invitation of a licensee;

- (g) an employee or an individual acting on behalf of the regulator or with the regulator’s authority;
 - (h) an employee or an individual acting on behalf of the government of another country in connection with spaceflight activities;
 - (i) an employee of the emergency services;
 - (j) an employee of SAIA;
 - (k) compliance authority personnel;
 - (l) an employee of a qualifying health and safety authority;
 - (m) a member of the armed forces of the Crown.
- (2) For the purposes of paragraph (1)—
- “compliance authority personnel” includes the following individuals—
- (a) an individual appointed as an Inspector of Spaceflight Accidents under regulation 6(1) of the Spaceflight Activities (Investigation of Spaceflight Accidents) Regulations 2021(2);
 - (b) CAA inspectors and auditors;
 - (c) inspectors of the Department for Environment, Food and Rural Affairs and its agencies;
 - (d) an air traffic controller;
 - (e) an employee of the National Crime Agency(3);
 - (f) an employee of an intelligence service;
 - (g) a constable;
- “officer” in paragraph (1)(e) has the meaning given in section 57(3);
- “partner” in paragraph (1)(e) has the meaning given in section 58(6).

(2) S.I. 2021/****.

(3) The National Crime Agency was established by section 1 of the Crime and Courts Act 2013 (c. 22).