

## SCHEDULE 4

Regulations 85 and 163

### Requirements and matters to be addressed by safety management systems

**1. In this Schedule—**

“emergency response plan” means the plan referred to in regulation 104 (in the case of a spaceflight operator) and in regulation 165 (in the case of a spaceport licensee);

“licensed activities” means the activities which a person is authorised to carry out by virtue of a launch operator licence, a return operator licence or a spaceport licence;

“licensee” means a person who holds a launch operator licence, a return operator licence or a spaceport licence under the Act;

“safety-critical information” means any information which is essential to the licensee satisfying its safety duty;

“safety duty” is to be construed in accordance with—

- (a) regulation 79, in the case of a spaceflight operator,
- (b) regulation 152, in the case of a spaceport licensee;

“security risk assessment” means the assessment required under—

- (a) regulation 170(5)(f), in the case of a spaceport licensee,
- (b) regulation 171(5)(f), in the case of a spaceflight operator, and
- (c) regulation 185(2)(f), in the case of either a spaceport licensee or a spaceflight operator.

**2. A safety management system must—**

- (a) be proportionate to the hazards, licensed activities and complexity of the licensee’s organisation,
- (b) be based on an assessment of the risks,
- (c) include within its scope the general management system, including the organisational structure, responsibilities, practices, procedures, processes and resources for determining and implementing the licensee’s spaceflight safety policy, and
- (d) be coordinated with the safety management system of any other licensee or other organisation with whom the licensee must interact during the provision of its licensed activities.

**3. A safety management system must include a written spaceflight safety policy which—**

- (a) is proportionate to the licensee’s safety duty,
- (b) sets out the licensee’s overall aims and principles of action,
- (c) sets out the role and responsibility of management, and its commitment towards continuously improving the licensee’s safety performance,
- (d) sets out a direct accountability for safety on the part of senior management, and
- (e) is signed by the accountable manager.

**4. The following matters must be addressed by the safety management system—**

- (a) in relation to the organisation and personnel—
  - (i) the safety roles and responsibilities of personnel involved in the management of major accident hazards at all levels in the organisation,
  - (ii) where relevant, the safety roles and responsibilities of personnel involved in the management of risks to human occupants at all levels in the organisation,

*Status: This is the original version (as it was originally made).*

- (iii) the identification of the training needs of personnel in paragraphs (i) and (ii), and the provision of the training with reference to the training management system the licensee has in place under regulation 58(8),
- (iv) the measures taken to raise awareness of the purpose and content of the licensee's spaceflight safety policy amongst such personnel,
- (v) the communication of safety-critical information, and
- (vi) the involvement of employees and agents involved in the licensed activities, who are important from the point of view of safety;
- (b) the identification and evaluation of major accident hazards by the adoption and implementation of procedures which—
  - (i) systematically identify those hazards,
  - (ii) assess their likelihood and severity,
  - (iii) take into account human factors in the initiation, prevention, control and mitigation of the consequences of those hazards, and
  - (iv) take into account the security risk assessment;
- (c) where relevant, the identification and evaluation of risks to human occupants by the adoption and implementation of procedures which—
  - (i) systematically identify the risks to those occupants,
  - (ii) assess their likelihood and severity,
  - (iii) take into account human factors in the initiation, prevention, control and mitigation of the consequences of those risks, and
  - (iv) take into account the security risk assessment;
- (d) in relation to operational control—
  - (i) the adoption and implementation of procedures which take account of human factors and instructions for—
    - (aa) safe operation including condition monitoring and maintenance of facilities or infrastructure and equipment;
    - (bb) where relevant, safe assembly and integration, including condition monitoring and maintenance of launch vehicles;
  - (ii) the taking into account of available information on best practices for monitoring and control, with a view to reducing the risk of system failure;
- (e) in relation to the management of change, the adoption and implementation of procedures which take account of human factors, for planning changes to licensed activities or organisational change;
- (f) in relation to planning for emergencies—
  - (i) the adoption and implementation of procedures to identify foreseeable emergencies by systematic analysis,
  - (ii) the preparation, testing and review of the emergency response plan, and
  - (iii) the provision of specific training for all personnel working in the licensee's organisation, including relevant subcontracted personnel;
- (g) in relation to monitoring performance, the adoption and implementation of procedures, which must include the matters referred to in paragraph 5, for—
  - (i) the ongoing assessment of compliance with the objectives set by the licensee's spaceflight safety policy and safety management system, and

- (ii) the mechanisms for investigation and taking corrective action in case of non-compliance or sub-standard safety performance of the safety management system;
  - (h) in relation to audit and review—
    - (i) the adoption and implementation of procedures for periodic systematic assessment of the licensee’s spaceflight safety policy and the effectiveness and suitability of the safety management system;
    - (ii) the documented review of performance of the safety policy and safety management system and its updating by senior management, including consideration and incorporation of necessary changes indicated by the audit and review.
5. The procedures referred to in paragraph 4(g)—
- (a) must cover the licensee’s system for internal reporting of occurrences, particularly those involving failure of protective measures, and their investigation and follow-up on the basis of lessons learned, and
  - (b) may include performance indicators such as safety performance indicators or other relevant indicators.