FINLAND

National mechanism:

Act on Space Activities, adopted in January 2018, entered into force 23rd January 2018.

Decree of the Ministry of Economic Affairs and Employment on Space Activities, adopted in January 2018, entered into force 23rd January 2018.

Description:

The Act on Space Activities (hereinafter the *Act*) was proposed by the Government to the Parliament in the end of October 2017.¹ The Act entered into force on 23rd of January 2018. The Act is complemented by a decree issued by the Ministry of Economic Affairs and Employment (hereinafter the *Decree*).

According to Section 5 of the Act, space activities are subject to prior authorization by the Ministry of Economic Affairs and Employment. The Ministry may authorize space activities provided that the conditions specified in Section 5 are met. One of the conditions is that the operator seeks to prevent the generation of space debris and adverse environmental impacts on the Earth, in the atmosphere and in outer space in accordance with Section 10. Furthermore, it is provided that the operator has to have a plan for terminating the activities in outer space and the related measures.

Section 10 of the Act contains provisions on environmental protection and space debris. According to the first paragraph, space activities shall be carried on in a manner that is environmentally sustainable and promotes the sustainable use of outer space. In its application for authorization, the operator shall assess the environmental impacts of the activity on the Earth, in the atmosphere and in outer space, and present a plan for measures to counter or reduce any possible adverse environmental impacts. Any nuclear materials and other radioactive materials used in the space object shall be specified in the application for authorization.

The second paragraph of Section 10 includes provisions with regard to space debris stipulating that the operator shall, in accordance with the recognised international guidelines, ensure that the activities in outer space do not generate space debris. It is further specified in the Government Proposal that the operator shall in particular restrict the generation of space debris during the normal operations of the space object, reduce the risks of in-orbit break-ups and in-orbit collisions, and after the space object has completed its mission, seek to move it into a less used orbit or into the atmosphere.

¹ The proposed provisions of an Act are included in a document referenced as 'Government Proposal' (157/2017), which also includes as a commentary section. The commentary provides an explanatory and supplementary guideline for the application and use of the Act (the commentary hereinafter the *Government Proposal*).

Space debris is not defined in the Act. In the detailed rationale of the Government Proposal, it is explained that space debris usually means non-functional space objects, including parts of space objects, that are in orbit or returning to the atmosphere. Consequently, the term includes non-functional satellites, spent rocket stages, parts and pieces detached from them, other material generated in space activities and particles as small as drops of fuel, paint flakes and micro particles.

According to Section 10, further provisions on the environmental impact assessment and the measures necessary to avoid the generation of space debris may be laid down by a decree by the Ministry of Economic Affairs and Employment. Accordingly, it is set out in the Decree that the operator shall seek to ensure that, within 25 years from the end of the functional operating period of the space object, the space object moves or is moved into the atmosphere or is moved into an orbit where it is considered not to cause any danger or harm to other space objects or other space activities.

Applicability:

The Scope of application

Space activities on the territory of Finland or carried on aboard a vessel or aircraft registered in Finland or by a Finnish citizen or a legal person incorporated in Finland fall under the scope of the Act. The Act applies both to governmental and non-governmental space activities. However, the provisions on authorization, insurance and supervision are not applied to space activities by the national Defence Forces.

Definition of space activities

According to the Act, space activities means launching space objects into outer space, operation and other control of space objects in outer space and returning space objects to the Earth. Space object means any object launched or intended to be launched into outer space, including the component parts of such an object, and any device and its component parts used or intended to be used for launching an object into outer space. Operator means a natural or legal person who is responsible for the carrying out of space activities of the Finnish act as well as decree on space activities is space activities on the territory of Finland or on vessels or airplanes registered in Finland.

Relation to international mechanisms:

According to the Finnish Act on Space Activities, the operator shall, in accordance with the recognised international guidelines, ensure that the activities in outer space so not generate space debris. The following are listed in the Government Proposal:

- Space Debris Mitigation Guidelines of the Committee on the Peaceful Uses of Outer Space
- IADC Space Debris Mitigation Guidelines
- European Code of Conduct for Space Debris Mitigation
- ISO Standards for space debris mitigation

Link to other national mechanisms:

None.

References:

Act on Space Activities (legally binding only in Finnish and Swedish):

https://tem.fi/documents/1410877/3227301/Act+on+Space+Activities/a3f9c6c9-18fd-4504-8ea9-bff1986fff28/Act+on+Space+Activities.pdf

Decree of the Ministry of Economic Affairs and Employment on Space Activities (legally binding only in Finnish and Swedish):

https://tem.fi/documents/1410877/3227301/Decree+of+the+MEAE+on+Space+Activities/08da7d7b-70e9-4c7e-bd2a-03220d6aa028/Decree+of+the+MEAE+on+Space+Activities.pdf

Government Proposal to Parliament for the approval and implementation of the Convention on Registration of Objects Launched into Outer Space and for the Act on Space Activities and the Act on the Amendment of Section 2 of the Lost and Found Objects Act (UNOFFICIAL TRANSLATION): https://tem.fi/documents/1410877/3227301/Government+Proposal+157-2017/21eb1c15-dc28-42bb-9180-a4c4ad4adc42/Government+Proposal+157-2017.pdf