

## CANADA

### National mechanisms:

1. Canadian Remote Sensing Space Systems Regulations – 2007

#### Legal Framework:

- *Canadian Remote Sensing Space Systems Act, 2005 (amended 2007)*
2. Canadian Space Agency adoption of the IADC Space Debris Mitigation Guidelines – 2012
  3. Client Procedures Circular CPC-2-6-02, Procedure for the Submission of Applications for Spectrum Licenses for Space Stations, Issue 5 – 2023

### 1. Canadian Remote Sensing Space Systems Regulations

#### Description:

The Canadian Remote Sensing Space Systems Act is a national law adopted by Parliament. The Canadian Remote Sensing Space Systems Regulations are made by the Governor-in-Council upon the recommendation of the Minister of Department of Foreign Affairs, Trade and Development.

A remote sensing satellite disposal plan must be provided in order to obtain a Remote Sensing Satellite License in Canada. Under the Canadian Remote Sensing Space Systems Act, no person in Canada shall operate a remote sensing space system in any manner, directly or indirectly, except under the authority of a License. The Act mentions that a License may not be issued without a “system disposal plan” that, among other things, provides for the protection of the environment, public health, and the safety of persons and property. The Acts also sets out licensees’ requirements and obligations in regard to the disposal plan.

The Canadian Remote Sensing Space Systems Regulations provides information on the implementation of the Act. Under the section *Remote Sensing Satellite Disposal* in Schedule 1, the Regulations set out the elements to be identified in the Disposal Plan, including the space debris mitigation standards.

#### Applicability:

The Act and its regulations are mandatory in Canada, and also apply to the following persons with respect to their activities outside Canada:

- (A) Canadian citizens;
- (B) permanent residents;
- (C) corporations that are incorporated or continued under the laws of Canada or a province;
- (D) members of any prescribed class of persons having a substantial connection to Canada related to remote sensing space systems.

## **2. Canadian Space Agency adoption of the IADC Space Debris Mitigation Guidelines**

### **Description:**

The Canadian Space Agency (CSA) adopted the Inter-Agency Space Debris Coordination Committee (IADC) Space Debris Mitigation Guidelines in 2012 to mitigate the potential creation of space debris generated from its projects, missions and activities. It is intended to apply the IADC guidelines in the planning, design, construction, operation and end of life of CSA projects, missions and activities for which a Space Debris Mitigation Plan will be established as required in the guidelines.

### **Applicability:**

The IADC Space Debris Mitigation Guidelines will apply to all CSA projects, missions and activities.

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### **3. Canadian Client Procedures Circular (CPC) for Licensing of Space Stations**

#### **Description:**

Innovation, Science and Economic Development Canada, a Department of the Government of Canada, administers Canada's licensing regime for space stations (satellites) through the Radiocommunication Act (RA) and the Radiocommunication Regulations. The document *Client Procedures Circular (CPC) 2-6-02 – Procedure for the Submission of Applications for Spectrum Licenses for Space Stations*, (satellites), includes application requirements and post-authorization procedures related to licenses that use radio spectrum.

Section 5.1.7 Space Debris Mitigation Plan of CPC-2-6-02 requires that applicants' spectrum licenses for space stations submit a Space Debris Mitigation Plan as part of their applications.

ISED distinguishes between geostationary orbit (GSO) and non-geostationary orbit (NGSO) satellites. The following is a summary of the requirements outlined in section 5.1.7 of CPC 2-6-02 :

- For GSO satellites, the applicant must submit a plan for de-orbiting their satellite(s) in compliance with Recommendation ITU-R S.1003-2, *Environmental Protection of the Geostationary Satellite Orbit*.
- For NGSO satellites, the applicant must submit a plan consistent with the guidelines issued by the Inter-Agency Space Debris Coordination Committee, including the requirement for the satellite(s) to de-orbiting within 25 years of end of operational life.

#### **Applicability:**

Use of radio frequencies in Canada requires regulatory approval that is provided through a radio authorization issued by Innovation, Science and Economic Development Canada. The space debris mitigation requirement is applicable to all space stations (satellites) licensed in Canada, and is a condition of license.

#### **Relation to international mechanisms:**

Canada contributed to and supported the development of the Space Debris Mitigation Guidelines of the Committee.

Canada regularly assesses the status of the implementation of the 21 Guidelines on the Long-term Sustainability of Outer Space Activities, including those that related to the safety of space operations and debris.

The space debris mitigation requirements of the Canadian Remote Sensing Space Systems Regulations are consistent with the Space Debris Mitigation Guidelines of the Committee and the IADC Space Debris Mitigation Guidelines.

The IADC Space Debris Mitigation Guidelines adopted by the CSA are consistent with the Space Debris Mitigation Guidelines of the Committee. They are also in compliance with the ISO 24113: Space Systems – Space Debris Mitigation Requirements, and the ITU recommendations ITU-R S.1003.

The Canadian Client Procedures Circular (CPC) for Licensing of Space Stations is in compliance with the ITU Recommendation ITU-R S.1003 and the Space Debris Mitigation Guidelines of the Committee.

**Link to other national mechanisms:**

Remote Sensing Space Systems Act (S.C. 2005, c. 45)

Radiocommunication Act ( R.S.C. , 1985, c. R-2)

**References:**

- Canadian Remote Sensing Space Systems Act: <http://laws-lois.justice.gc.ca/eng/acts/R-5.4/index.html>
- Remote Sensing Space Systems Regulations: <http://laws-lois.justice.gc.ca/PDF/SOR-2007-66.pdf>
- Radiocommunication Act: <https://laws.justice.gc.ca/eng/acts/R-2/FullText.html>
- Radiocommunication Regulations: <https://laws-lois.justice.gc.ca/eng/regulations/sor-96-484/FullText.html>
- CPC-2-6-02-Licensing of Space Stations: [CPC-2-6-02 — Procedure for the Submission of Applications for Spectrum Licences for Space Stations \(canada.ca\)](http://www.csc.gc.ca/cpc-2-6-02-procedure-for-the-submission-of-applications-for-spectrum-licences-for-space-stations/canada.ca)