

# Regulatory Provisions on Satellite Communications

## Title One Scope

### Chapter I General Provisions

1. These Regulatory Provisions are of public order and its purpose is to govern Satellite Communications, the use, enjoyment and exploitation of the Satellite Orbits with their respective associated Frequency Bands and the Ancillary Terrestrial Component for Satellite Systems.
2. The Institute, within the scope of its competence, shall guarantee at all times the availability of Orbital Resources for services of national security, public safety, connectivity of public sites, social coverage and other needs, functions, purposes and goals of the Executive Branch of the Federal Government and will assist the Ministry in the implementation of the public policies it determines for the development of the satellite sector.
3. For the purposes of these Regulatory Provisions, it will be understood as:
  - I. **Administration:** Any government, department or service of an ITU member that request and notify a Satellite Network Filing and is responsible for fulfilling the obligations arising from such notification process in accordance with the Constitution of the International Telecommunication Union, the Convention of the International Telecommunication Union and its administrative regulations.
  - II. **API:** Advanced Publication Information. Initial stage in the process to notify a Satellite Network Filing before the ITU, for Frequency Bands not subject to Coordination.
  - III. **Landing Rights Authorization:** Administrative act by which the Institute grants the right to a natural or legal person to exploit the rights of emission and reception of signals and Frequency Bands associated to Foreign Satellite Systems that cover and can provide services within the country.
  - IV. **Transmitting Earth Station Authorization:** Administrative act by which the Institute grants the right to a natural or legal person to deploy, operate and/or exploit Transmitting Earth Stations.
  - V. **Landing Rights Authorization Holder:** Natural or legal person holding a Landing Rights Authorization.

- VI. Transmitting Earth Station Authorization Holder:** Natural or legal person holding a Transmitting Earth Station Authorization.
- VII. Frequency Band:** Portion of the Radio Spectrum comprised between two determined frequencies.
- VIII. Satellite Capacity:** Amount of Radio Spectrum, measured in hertz, likely to be supplied by a Satellite System to carry out Satellite Services Traffic.
- IX. Control and Operation Center:** Earth stations operating in an integrated way that have the associated telemetry, tracking and command equipment in order to control the operation of one or more Satellites and/or Spacecrafts.
- X. CNAF:** National Frequency Allocation Table. Administrative provision that indicates the radiocommunication service or services to which a determined Radio Spectrum Frequency Band is allocated, as well as additional information regarding the use and planning of certain Frequency Bands.
- XI. Ancillary Terrestrial Component:** A ground auxiliary system that is an integral part of a Satellite System whose purpose is to complement the provision of Satellite Services with infrastructure deployed on land, which operates in the same Frequency Bands than the Satellite System.
- XII. Satellite Communication:** Emission, transmission or reception of signs, signals, audio or audio and associated video signals, data, writings, images, voice, sounds or information of any nature by radio waves through a Satellite System.
- XIII. Orbital Resources Concession:** Administrative act by which the Institute grants the right to occupy and/or exploit an Orbital Resources, under the terms and modalities established in the Constitution, the Law and other applicable regulatory and administrative provisions.
- XIV. Orbital Resources Concessionaire:** Natural or legal person holding an Orbital Resources Concession.
- XV. Coordination:** Stage to notify a Satellite Network Filing before the ITU, for Frequency Bands that require coordination, in order to do not cause or receive harmful interference.
- XVI. Co-location:** Placing two or more Satellites in the same GOP, in accordance with international standards.
- XVII. De-orbiting:** Maneuvers to take out a Satellite from a Satellite Orbit, permanently.

- XVIII. Regulatory Provisions:** Regulatory Provisions for Satellite Communications.
- XIX. M2M Satellite Communications Device:** Radiocommunications equipment for machine-to-machine communications that carries information of any nature through a Satellite System.
- XX. Space Station:** One or more transmitters and/or receivers, including the accessory equipment, necessary at one location for carrying on a radiocommunication service, located on an object which is beyond, is intended to go beyond, or has been beyond, the major portion of the Earth's atmosphere.
- XXI. Transmitting Earth Station:** The antenna and the associated equipment used to transmit Satellite Communications.
- XXII. IARU:** International Amateur Radio Union.
- XXIII. Bringing into Operations:** Time when the Orbital Resources Concessionaires or Landing Rights Authorization Holders are able to offer and provide the Satellite Capacity Provision Service.
- XXIV. Institute:** Federal Telecommunications Institute.
- XXV. Law:** Federal Telecommunications and Broadcasting Law.
- XXVI. Concessions Guidelines:** General Guidelines to Grant the Concessions described in Title Four of the Federal Telecommunications and Broadcasting Law.
- XXVII. Public Consultation Guidelines:** Guidelines for Public Consultation and Regulatory Impact Analysis of the Federal Telecommunications Institute.
- XXVIII. Notification:** Final stage in the process to notify a Satellite Network Filing before the ITU, in order to be recorded in the Master International Frequency Register.
- XXIX. Satellite Operator:** Natural or legal person that operates a Satellite System.
- XXX. Foreign Satellite Operator:** Natural or legal person that operates a Foreign Satellite System.
- XXXI. Inclined Orbit Operation:** Satellite operation in a position that forms a non-zero angle relative to the equatorial plane, in the geostationary orbit.
- XXXII. Satellite Orbit:** The trajectory that describes a Space Station around the Earth.

- XXXIII. Contingency Plan:** Document in which Orbital Resources Concessionaires and/or Landing Rights Authorization Holder should specify the guidelines they will follow in the event of service interruption.
- XXXIV. Replacement Plan:** Document in which Orbital Resources Concessionaires should specify the guidelines they will follow in the event of a Satellite substitution.
- XXXV. GOP:** Geostationary Orbital Position. Any location in the Earth's equatorial plane at approximately 36000 kilometers of altitude, that allows a Satellite to maintain a translational period equal to the period of the Earth's rotation.
- XXXVI. Orbital Resources Exploitation and Occupation Program:** Institute's release regarding to Orbital Resources that shall be subject to a public tender process.
- XXXVII. Orbital Resource:** GOP or Satellite Orbit with their respective associated Frequency Bands, which may be object of a Concession.
- XXXVIII. Satellite Network Filing:** Filing with technical characteristics of the Satellite Orbit with their respective associated Frequency Bands that is managed before the ITU.
- XXXIX. Authorizations Rules:** General rules which establish terms and requirements to grant an authorization in telecommunications matters as stated by the Federal Telecommunications and Broadcasting Law.
- XL. RR:** ITU Radio Regulations.
- XLI. Relocation:** Changing the location of a Satellite from one GOP or Satellite Orbit to another GOP or Satellite Orbit.
- XLII. Satellite Capacity Reserve:** Portion of the Radio Spectrum or cash defined by The Ministry that should be provided by Orbital Resources Concessionaires and Landing Rights Authorization Holders in order to meet national security networks, social services and other government needs.
- XLIII. Satellite:** An object placed in a Satellite Orbit, equipped with a Space Station to receive, transmit or retransmit radio signals to/or from Earth Stations or other Satellites.
- XLIV. Ministry:** The Ministry of Communications and Transportation.
- XLV. Ancillary Terrestrial Service:** Auxiliary service linked to Satellite Services, which uses infrastructure deployed on the ground and operates in the same Frequency Bands

granted to the Satellite System, in order to transmit signs, signals, writings, images, voice, sounds or information of any nature.

- XLVI. Short-Duration Mission Service:** Space radiocommunication service used by non-geostationary systems with short-duration missions in order to emit and receive radio waves for specific telecommunication purposes by one or more non-geostationary satellites of reduced mass and size, with missions that shall not exceed more than three years.
- XLVII. Satellite Capacity Supply Service:** Bandwidth measured in hertz, or its equivalent in bits per second, that the Orbital Resource Concessionaires or Landing Rights Authorization Holders should supply to provide Satellite Services.
- XLVIII. Satellite Service:** A radiocommunication service provided by a Satellite System.
- XLIX. Satellite System:** One or more Satellites and its respective Control and Operation Center that operate in an integrated way.
  - L. Foreign Satellite System:** Satellite System that operates under a Satellite Network Filing notified before the ITU by a foreign Administration.
  - LI. National Satellite System:** Satellite System that operates under a national Satellite Network Filing notified before the ITU by the Mexican Administration.
  - LII. Traffic:** Data, writing, images, video, voice, sounds or information of any nature sent through a telecommunications network.
  - LIII. TT&C:** Subsystem of telemetry, tracking and control of a Satellite from the Earth. Telemetry consists of monitoring the state of a satellite through the collection, processing and transmission of data from various subsystems; tracking consists of determining the exact location of a satellite through the reception, processing and transmission of tracking signals; and the control of the satellite through the reception, processing and implementation of commands transmitted from Earth.
  - LIV. Telecommunications:** All emission, transmission or reception of signs, signals, data, writing, images, voice, sounds or information of any kind that is transmitted by wire, radio, optical, physical or other electromagnetic systems, not including broadcasting.
  - LV. ITU:** International Telecommunication Union.
  - LVI. End User:** Natural or legal person that uses a telecommunication service as end user.

- LVII. Spacecraft:** Mean of transport which is intended to go beyond the major portion of the Earth's atmosphere, carrying on a Space Station which allows it to transmit or retransmit radiocommunication signals from or to Earth Stations or others Satellites.
- LVIII. Lifetime:** Estimated period in which a Satellite remains operational.
- LIX. VSAT:** Very Small Aperture Terminal.
- LX. Service Area:** Geographical area defined in a Satellite Network Filing, in which a radiocommunication can be established with one or more Earth Stations.

The terms above may be used indistinctly in singular or plural. For terms and definitions not covered by these Regulatory Provisions, see the Law or the applicable regulations.

4. The Institute will ensure that Orbital Resources Concessionaires and Landing Rights Authorization Holders provide sufficient and adequate Satellite Capacity Reserve.
5. The Institute will provide technical and legal support to those interested in obtaining an Orbital Resource, as well as those Orbital Resources Concessionaires who require from the Mexican Administration the submission of any issue related to the operation of the National Satellite System or the Satellite Network Filing before the ITU.
6. It is within the scope of the Governing Board of the Institute to interpret the Regulatory Provisions meaning.

## **Title Two**

### **Mechanisms to Grant Concessions for Orbital Resources**

7. The Institute may grant to natural or legal persons of Mexican nationality a concession for Orbital Resources for which the priority for its occupation is already held by the Mexican Administration, through the following mechanisms:
  - a. Public tender
  - b. Direct grant
  - c. Grant by request of an interested party

## **Chapter I**

### **Public Tender**

8. Concessions to occupy and exploit Orbital Resources for commercial or private use for private communications purposes as provided by Article 76, Section III, paragraph a) of the Law, shall be granted only through a public tender, after receiving payment of the economic consideration.

9. In the case of Orbital Resources that may be subject to a public tender, the occupation priority should be understood when the Orbital Resources were assigned to the Mexican Administration by the ITU.

The Institute will determine the feasibility of subjecting the Orbital Resources to a public tender, considering the manifest interest of the Federal Government or third parties in occupying an Orbital Resource, for which it will release an Orbital Resources Exploitation and Occupation Program, in which it will establish the Orbital Resources to be tendered, as well as their technical characteristics and the service to which they are allocated.

Prior to the release of the Orbital Resources Exploitation and Occupation Program, the Institute will consult with the Ministry whether there is an interest in occupying and exploiting those Orbital Resources.

10. The Institute will request information from the Ministry annually to find out if there are Orbital Resources assigned to the Mexican Administration. This, in order for the Institute to determine whether they will be included in an Orbital Resources Exploitation and Occupation Program.
11. Tenders shall be carried out in accordance with the call and the tender rules issued by the Institute for this purpose, which will be published on the Institute Website no later than the publication date of the call at the Official Gazette. The tender rules shall include, at least the provisions of Article 93 of the Law.
12. The Institute will conduct a public integration consultation on the preliminary draft of the tender rules, in order to ensure transparency to the procedure and make it known to all those interested to participate in it; as well as to obtain information and elements to enrich the tender rules proposal. To this end, the Institute will comply with the provisions set forth in the Public Consultation Guidelines.

Prior to the issuance of the tender rules public consultation, the Institute will consult with the Ministry about the Satellite Capacity Reserve to be required for the Federal Government.

13. The Institute will determine the corresponding minimum reference value in each tender, taking into account the elements for setting the amount of the economic considerations referred to in Article 100 of the Law, upon request for a prior non-binding opinion of the Ministry of Finance and Public Credit. The economic consideration shall be obtained from the tender's bid submission procedure under the terms of the tender rules.
14. The respective Concession title shall contain, in addition to the elements described in Article 94 of the Law, among others, the following:

- Service Area
- Satellite's technical characteristics
- Modalities of use of the Concession
- Estimated date when the Satellite should be located in the Satellite Orbit
- Date of Bringing into Operations
- Technical characteristics and location of the Control and Operation Center
- The possibility for the Institute to grant other concessions or authorizations in the same Frequency Bands

## **Chapter II**

### **Direct Grant**

- 15.** Orbital Resources subject to direct grant shall be those recognized by the ITU to the Mexican Administration, as having occupation priority and are available for public, social or private concession granting; in the last case, for the purposes provided by Article 76, Section III, paragraph b) of the Law. The processing of applications for direct grant will be carried out in accordance with the formalities and procedures established in the Concessions Guidelines.
- 16.** The three government branches, Mexican States, Mexico City, municipalities and districts, autonomous constitutional entities and public higher education institutions may request the Institute, through direct grant mechanism, Orbital Resources for the compliance of their purposes and attributions.
- 17.** The Institute will evaluate the direct grant request in accordance with the principles and objectives established by the Law, after accreditation of the requirements set forth in the Concessions Guidelines. If deemed appropriate, the Institute shall grant an Orbital Resources Concession for public use without economic consideration, except for the concessionaires referred to in Article 84 of the Law, in accordance with the formalities and procedures provided in the Concessions Guidelines.
- 18.** Non-profit civil society organizations with cultural, scientific, educational and community purposes and organizations incorporated under the principles of direct citizen participation, social cohesion, equity, gender equality and plurality; indigenous people and communities, and private higher education institutions may request to the Institute, through the direct grant mechanism, Orbital Resources.

The Institute will evaluate the request and will determine if it is feasible to grant an Orbital Resource Concession for social use. For that purpose, the applicant should carry out the formalities and procedures provided for in the Concessions Guidelines.



Orbital Resources Concessionaires for social use should not commercially exploit or share with third parties the Orbital Resources, nor offer and/or provide the Satellite Capacity Provision Service for profit purposes.

- 19.** To ensure at all times the availability of Orbital Resources for national security, public safety, public site connectivity, social coverage services and other needs, functions, purposes and objectives of the Executive Branch of the Federal Government, the Institute should grant directly public concessions to the departments and entities of the Federal Public Administration without an economic consideration, with preference over third parties and for a period of up to 20 years on an irrevocable basis. , This, after a compliance evaluation of the principles and objectives set forth in the Law for radio frequency spectrum management and plans and programs issued regarding radio frequency spectrum and Orbital Resources issues.

### **Chapter III**

#### **Grant by Request of an Interested Party**

- 20.** Any natural or legal person with Mexican nationality may submit to the Institute a request to obtain Orbital Resources in favor of the Mexican Administration. Those interested in the process for obtaining Orbital Resources by request of an interested party, should submit the following information and documentation:

**I.** Applicant general data:

- a.** Name or corporate name of the interested party. Full name of natural or legal person interested in obtaining Orbital Resources in favor of the Mexican Administration.

- For natural persons. The interested party should prove their Mexican nationality, by means of the original or certified copy of any of the following documents: birth certificate, Mexican nationality certificate, naturalization card, valid passport, citizen identity card, voting card, National Military Service card or professional certificate.
- For legal persons. The interested party may prove its Mexican nationality by means of testimony or certified copy of the public deed in which the constitutive act is recorded, duly registered in the Public Registry of Commerce, or certification of bylaws in force, except for civil societies or associations, where such registration will not be required.

The nationality of departments, entities or public institutions should be proved with its legal constitution, in accordance with the applicable regulations regarding to its legal nature.

- b.** Legal Representative. For legal persons and, where appropriate, natural persons, the identity and powers of the legal representative should be proved with testimony or a certified copy of the legal instrument granted by a notary public which proves that the representative has at least a general powers for acts of administration, attaching a simple copy of the official identification of the legal representative (any of those referred to in first subparagraph a) above).

For departments, entities or public institutions, legal representation shall be accredited with a simple copy of the respective appointment or testimony or certified copy of the corresponding public instrument.

- c.** Address to hear and receive notifications. Address designation in national territory (street, exterior number, interior number, locality or colony, municipality or territorial demarcation, federal entity and zip code). It shall be proved with a simple copy of any service receipt (power utility, water, telecommunications services or parcel property tax), with a maximum date of three more months from the date of its submission.

- d.** Email and/or phone number of the applicant or their legal representative.

## **II.** Technical information:

### **a.** Data to process a Satellite Network Filing

- Satellite Network Filing name
- Frequency Band(s)
- Mode of use: commercial, private, social or public
- Radiocommunication services intended to be offered in each of the Frequency Bands, as indicated in the CNAF
- Planned Service Area
- Project's technical specifications

### **b.** The type of Orbital Resource to be requested (subject or not to Coordination)

- Satellite Orbit (geostationary or non-geostationary)

- Inclination Angle of the orbit from the equatorial plane
  - Satellite's Period
  - Apogee and perigee altitude
  - Number of orbital planes
  - Number of Satellites per orbital plane
- c.** Digital format file generated through the ITU SpaceCap software, regarding API or Coordination information, as appropriate.
- d.** Any additional technical information that the applicant considers relevant.
- III.** Investment project.
- IV.** Documentation that proves the technical capacity; as well as additional technical information that the applicant considers relevant.

In addition, the applicant, by submitting the format indicated in the following numeral, will be obligated to participate with and assist the Federal Government in all necessary steps to obtain or register Orbital Resources in favor of the Mexican Administration, including, where appropriate, those related to Coordination; as well as to provide all the necessary information for the user registration on the ITU electronic platform, and to attach the files containing the information corresponding to the data of the Satellite Network Filing.

**21.** The interested party should submit the appropriate application to the Institute, in accordance with the procedure UER-01-004, format "Request by interested party to obtain orbital resources in favor of the Mexican Administration" which is available at the Institute's website, along with the requirements set forth in numeral 20.

**21.1.** The Institute will analyze and evaluate the documentation submitted by the applicant and, if it meets all the requirements, shall accept the application to process and notify it to the interested party within 30 business days of its submission.

**21.2.** The Institute, within the period indicated in the previous paragraph, shall request the applicant on a one-time basis if the applicant has omitted any of the requirements set forth in numeral 20 of the Regulatory Provisions. For this purpose, the Institute shall grant the applicant a period of up to 30 business days, starting the following day after the effective notification date, to comply with the omission or defect.

After the indicated period has elapsed without the Institute's request being fulfilled or the above requirements being met, the Institute will consider the application

non-filed, notify it to the interested party and return the documentation attached to the application.

If the Institute's request has been fulfilled and all the requirements were met, the Institute shall accept the application to process and notify it to the interested party within 15 business days.

- 21.3.** The filing shall be considered completed once the Institute has reviewed and analyzed the information submitted by the applicant and determines that it meets all the requirements; or after the expiry of the periods for admitting the application, as provided in numerals 21.1 and 21.2 of the Regulatory Provisions.

Once the filing has been completed, the Institute shall, within a period of not more than 10 business days, forward it to the Ministry with the estimate of the expenses in which the Institute may incur, for the Ministry to determine the admissibility of the application under the terms of Article 97 of the Law.

- 21.4.** The Institute shall notify the interested party of the response issued by the Ministry, in order to inform of any of the following assumptions:

- i. The admission of the application by the Ministry and, if applicable, the amount of the bail or letter of credit in favor of the Federal Government and/or the Institute, to ensure the seriousness of the applicant and the costs in which the Federal Government and/or the Institute may incur, as established and calculated by the Ministry and/or the Institute, or
- ii. The reasons why the Ministry considers the request inadmissible.

In the case of paragraph i. of this numeral, the applicant should process the bail or letter of credit for the amount set and submit the original document to the Institute, for the Ministry to be able to initiate the procedure to obtain the Orbital Resource before the ITU.

- 21.5.** The Institute, in accordance with its responsibilities, will assist and collaborate with the Ministry in the Coordination and obtaining process of Orbital Resources before the ITU, as well as entities of other Administrations, Orbital Resources Concessionaires, Landing Rights Authorization Holders and other Satellite Operators.

- 21.6.** The applicant should submit the information required by the ITU in order to have sufficient data for the Coordination and to obtain the Orbital Resource.

For the case of Frequency Bands allocated to the amateur satellite service or for those enabled for the provision of that service, the applicant should certify that coordination before the IARU was obtained.

- 21.7.** The Institute's response to applications from an interested party for obtaining Orbital Resources in favor of the Mexican Administration will be issued within 15 business days after the Institute has formal knowledge about obtaining the priority of the Orbital Resource occupation, in accordance with the regulations and procedures established in the RR.

The interested party should bear in mind that the response referred to in this numeral shall be in accordance with ITU's terms and procedures, in accordance with the provisions of the RR.

- 22.** If the applicant has been notified of obtaining the Orbital Resource in favor of the Mexican Administration, he may submit the application for the Orbital Resources Concession before the Institute, in accordance with the requirements and procedures set forth in the Concessions Guidelines.
- 23.** In accordance with the modality of use of the Orbital Resources Concession, the Institute may determine the payment of an economic consideration, from which it will deduct the expenses previously incurred by the applicant and which had been considered by the bail or letter of credit referred to in the last paragraph of numeral 21.4 of the Regulatory Provisions.
- 24.** The applicant may transfer to a third party the application rights for obtaining the Orbital Resource, subject to the approval of the Institute, who should inform the Ministry for the purpose of registering the applicable information before the ITU, as well as the update of the corresponding bail or letter of credit.
- 25.** In the event that the applicant desists of requesting the Orbital Resource, the bail or letter of credit will be executed as determined by the Ministry.

Without prejudice of the above paragraph, if the Orbital Resource is obtained in favor of the Mexican Administration, the applicant may not claim any rights or benefits regarding the grant, occupation and/or exploitation of such resource.

## **Title Three**

### **Satellite Systems and Earth Stations Operation**

#### **Chapter I**

#### **General Provisions for the Satellite Systems Operation**

26. Satellite Systems should operate in accordance with the technical parameters authorized in the Orbital Resources Concession title or Landing Rights Authorization title. Satellite Systems may operate with lower values than those indicated in the concession title or authorization title, as long as it does not affect the continuity and quality in the provision of the service.

27. Orbital Resources Concessionaires and Landing Rights Authorization Holders should provide all information and documentation required by the Institute or the Ministry.

Orbital Resources Concessionaires and Landing Rights Authorization Holders should have sufficient technical elements to stop emissions temporally; they should also comply with Title Eight of the Law and the applicable administrative provisions.

28. Orbital Resources Concessionaires will be responsible for the operation of the associated Satellite System. Orbital Resources Concessionaires and Landing Rights Authorization Holders shall be responsible for any damages they may cause to third parties, and shall comply any applicable legal and administrative provisions.

## **Section I**

### **Harmful Interference**

29. In the case of harmful interference from National and Foreign Satellite Systems to telecommunications services related to the security of human life, radionavigation or national security, the Institute will order the immediate suspension of any Satellite System operations within Mexican territory that are causing harmful interference and will take the necessary measures to do so.

30. Orbital Resources Concessionaires may submit a complaint before the Institute when they find that their operating Satellite Systems are being subject of harmful interferences due to the operation of other National or Foreign Satellite Systems or terrestrial telecommunications systems.

The Institute will evaluate the information and the analysis submitted and, in case of harmful interference to the National Satellite System, it will determine the actions to be taken, considering the following:

- i. When harmful interference comes from Foreign Satellite Systems subject to a Landing Rights Authorization, the Institute will notify the interference report to the Landing Rights Authorization Holder and request the mitigation of those.
- ii. When harmful interference comes from Foreign Satellite Systems that are not subject to a Landing Rights Authorization, the Institute shall notify the Ministry and shall assist, if required, in the coordination with the Administration or

Satellite Operator responsible for the interfering Satellite System, in accordance with international regulations and best practices.

- iii. When harmful interference comes from another National Satellite System or a terrestrial telecommunications system, the Institute shall establish, in coordination with those affected, the measures to be taken for the harmful interference mitigation between the parties, in accordance with applicable regulations and the conditions of the respective Orbital Resources Concession titles or spectrum concession titles or authorization titles for terrestrial services.

- 31. The Institute, after a request by the Ministry, will carry out the necessary technical analyses and studies to identify potential harmful interference to any Orbital Resources assigned or allocated to Mexico, but yet not granted, and will implement the necessary actions to mitigate potential interference.
- 32. If a nonconformity is presented before the Institute for harmful interference from National Satellite Systems to other Satellite Systems or national radiocommunication systems, the Institute will notify the Orbital Resources Concessionaires and will request to review the operation of the National Satellite System to confirm that their operation is in compliance with the technical parameters authorized in the concession and notified before the ITU.

If it is confirmed that the National Satellite System operates in compliance with the concession title, but harmful interference persists, the involved parties will need to agree on the necessary measures to mitigate the interference in accordance with international regulations and best practices.

In the event of harmful interference coming from Foreign Satellite Systems or foreign terrestrial telecommunications systems, the corresponding procedures should be carried out with the involved Administration of the countries which systems are causing harmful interference.

In the absence of agreement among the involved Administrations, the Institute will notify it to the Ministry in order to reach an agreement with the foreign Administration which notified the Satellite Network Filing before the ITU.

- 33. In the event of harmful interference between Foreign Satellite Systems authorized in Mexico, the following will proceed:
  - i. The Institute will request the Landing Rights Authorization Holders, in coordination with Foreign Satellite Operators, to mitigate harmful interference within Mexico.

- ii. In the event that harmful interferences are mitigated within Mexican territory through agreements among Landing Rights Authorization Holders or Satellite Operators or by international coordination agreements, the Landing Rights Authorization Holders will notify the Institute the agreed conditions, and those who temporarily suspended their emissions may restart service provisioning in Mexico in accordance with their authorization.
- iii. When the necessary arrangements to mitigate harmful interferences between Landing Rights Authorization Holders or Satellite Operators are not reached, the Institute shall determine the steps forward taking into account the following criteria:
  - a. That Satellite System operations are carried out in accordance with the technical characteristics contained in the Landing Rights Authorization title.
  - b. Date of Bringing into Operations in Mexico.
  - c. The granting date of the Landing Rights Authorization or the modification date in which the Frequency Bands involved were included.

If, as a result of the application of the above criteria, it is not possible to make a determination, the Institute may take into account the order of priority of the Satellite Network Filing before the ITU, based on the procedures and terms established.

- iv. Taking into account what is stated in the previous numeral, the Institute may determine new operating conditions, or even the partial or total cease of emissions from one of the Satellite Systems and, where appropriate, proceed to remove the corresponding Satellite System from the authorization.

## **Section II**

### **Satellite System Failures**

- 34. When an unexpected and irretrievable failure occurs in the control of a Satellite or any of the Satellites of the Satellite System that affects or interrupts the provision and/or quality of services, the corresponding Orbital Resources Concessionaire or Landing Rights Authorization Holder should notify the Institute, through their duly accredited legal representatives, no later than 5 business days after the date of the failure event by submitting the report and description of the failure through the Institute's correspondence



office. The Institute shall inform this to the Ministry. The above with independence of what the Institute establishes in terms of regulating the quality of the services offered by the Satellite System.

35. In the case of the previous numeral, the Orbital Resources Concessionaire or Landing Rights Authorization Holder should follow the terms contained in the Contingency Plan. If such plan has not been submitted for approval before the Institute, the Orbital Resources Concessionaire or the Landing Rights Authorization Holder should take the actions provided in Section III of this Chapter.
36. In the event that the control and/or operation of the Satellite is restored, the Orbital Resources Concessionaire or the Landing Rights Authorization Holder should inform it to the Institute no later than 5 business days after the restoration occurs, attaching the corresponding report.

### **Section III Contingency Plan**

37. Orbital Resources Concessionaires and Landing Rights Authorization Holders should submit for approval to the Institute, within 180 calendar days from the granting date of the Orbital Resources Concession or Landing Rights Authorization, a Contingency Plan to prevent and, if applicable, solve service interruption, to ensure its continuity in case of replacement or partial or total failure of any element of the Satellite System. The Institute will resolve about this petition within a term of 30 business days. The above with independence of what the Institute establishes in terms of quality of the services offered by the Satellite System.

If the Contingency Plan consider to use the satellite capacity of other Orbital Resources Concessionaires or Landing Rights Authorization Holders for them to operate as backup in order to guarantee the continuity of service, it will be the responsibility of Orbital Resources Concessionaires or Landing Rights Authorization Holders to achieve the agreements or contracts needed to do so.

38. The Contingency Plan should include, at least, the following:
  - i. Notification procedure between the departments of the Orbital Resource Concessionaire or Landing Rights Authorization Holder involved with the failure fixing and coordination, and the corresponding departments of other Orbital Resource Concessionaires or Landing Rights Authorization Holders who will provide the backup Satellite for the provision of services, including the contact list of names and telephone numbers of those responsible of the Satellite System operation and the responsible for the Control and Operation Centers;

- ii. Coordination procedure with the Satellite Service's users to grant them access and migration to the backup Satellite, in which the actions and measures to be taken in the short, medium and long term should be provided to support users, in order to ensure continuity of services;
  - iii. Commitment to give priority to the relocation in other Satellite Systems to the Satellite Capacity Reserve for the operation of national security networks and social services, as well as for other strategic services operated by the Mexican Government, in order to ensure the continuity of these services. In such situation, the Earth-to-space transmission signals from these services will occur within Mexican territory, and
  - iv. Action plan to provide emergency services in fortuitous or force majeure cases. In the event of an emergency within Mexican territory, Orbital Resources Concessionaires or Landing Rights Authorization Holders will provide, within their Service Area, the essential services indicated by the Institute, free of charge and just for the time and proportion that the emergency needs.
39. Orbital Resources Concessionaires and Landing Rights Authorization Holders should give immediate notice to the Ministry and the Institute of any event that has a repercussion or significant impact on the provision of services.

## **Chapter II**

### **National Satellite Systems Operations**

40. The National Satellite Systems should include the Mexican territory in its Service Area in all cases where, due to the GOP location or the Satellite Orbit trajectory, the Satellite could cover partially or totally the Mexican territory.

In case of Orbital Resources Concessionaires for social or public use, the Service Area should necessarily include the Mexican territory and provide Satellite Services in it.

41. Orbital Resources Concessionaires shall be obligated to comply with the applicable national and international regulations, regardless of whether they can be partners of one or more Satellite Operators for the control and operation of the Satellite System.
42. Orbital Resources Concessionaires who want to modify one or more Satellite Network Filings shall submit to the Institute the corresponding request attaching the following information and documentation:
- a. The one where the required modification and its justification are indicated;

- b.** When appropriate, the information and/or technical documentation that supports the requested modification.

- 42.1.** The application to modify the Satellite Network Filing will be processed in accordance with the procedure established in Title Two, Chapter II of the Regulatory Provisions.
- 42.2.** If the modifications management before the ITU were concluded favorably, the Orbital Resources Concessionaire should submit before the Institute a modification request for its concession title.
- 42.3.** Based on the Satellite Network Filing modifications nature and the modality use of the Orbital Resources Concession, the Institute may determine the payment of an economic consideration, from which the applicant will deduct the expenses previously paid and that have been contemplated on the required bail or letter of credit.

If the modification to the Satellite Network Filing implies a Frequency Bands addition, an opinion will be requested to the Ministry regarding the previously established Satellite Capacity Reserve.

- 43.** Orbital Resources Concessionaires who want to modify the technical characteristics provided in its Orbital Resources Concession, which do not imply a modification in one or more Satellite Network Filings, should submit a modification application before the Institute.
- 44.** Orbital Resources Concessionaires that want to extend the duration of the term of validity of a Satellite Network Filing, should submit to the Institute an application with the necessary information that guarantees the occupation of the Orbital Resource for the requested period with at least 4 years in advance to the conclusion of the term associated with the Satellite Network Filing, so management actions can be taken in coordination with the Ministry.
- 45.** Orbital Resources Concessionaires, within the terms established in the RR, should inform the Ministry and the Institute of possible impairments that could be caused to their Orbital Resources, based on the periodic publications of the ITU Satellite Network Filings.

When the Orbital Resources Concessionaires estimate impairments to their Satellite Systems, without having being identified by the ITU, they should inform the Ministry and the Institute, with the adequate technical justification, within the terms established in the RR.

## **Section I**

### **Replacement Plan**

**46.** Orbital Resources Concessionaires should submit for Institute's approval a Replacement Plan for the Satellites of the National Satellite System, 5 years prior to the end of the Lifetime of the Satellite to be replaced. The Institute will resolve about its relevance within the term of 60 business days.

**47.** The Replacement Plan shall consider one of the following mechanisms:

- i.** The design, construction, launch and bringing into operation for service provisioning of a new Satellite, anticipating the time involved, or
- ii.** The Satellite Relocation, either of their own or from a third party, to the corresponding GOP or Satellite Orbit, anticipating the time involved. The foregoing, in accordance with the conditions outlined in the Orbital Resources Concession title and in the RR.

For cases where the Satellite replacement has less than 5 years of Lifetime, a new Replacement Plan should be submitted within 30 business days of the conclusion of the Relocation.

**48.** For any of the previous cases, the following information and documentation should be submitted before the Institute:

- a.** Specifications, technical characteristics and Lifetime of the replacement Satellite;
- b.** Measures and actions to guarantee the continuity in the provision of the service;
- c.** De-orbiting Plan of the Satellite to be replaced, in case of not relocating it;
- d.** Estimated date of launch of the replacement Satellite and arrival at the Satellite Orbit, in case it is a new Satellite or a Relocation;
- e.** Any other information that supports the execution of the Replacement Plan.

**49.** If during the execution of the Replacement Plan the Institute detects that the service continuity is not guaranteed and/or national or international regulations are not followed, it may instruct the Orbital Resources Concessionaires for additional or different preventive or corrective measures to those considered in the Replacement Plan.

**50.** To ensure the continuity in the provision of the services while the Replacement Plan is being executed, Orbital Resources Concessionaires could, according to the applicable legal instruments, use the Satellite fleet of one or more Satellite Operators or some other mechanism proposed by them.

51. In case of failures or losses in the replacement Satellite launch, the Orbital Resources Concessionaires should notify the Institute within 10 business days after the failure or loss occurs and should propose measures that will be implemented to guarantee the continuity in the service provision and the compliance of the applicable international regulations.
52. Orbital Resources Concessionaires should provide the Institute with the information and documentation that proves the compliance of the Satellite Replacement Plan, within 30 business days after the replacement Satellite is already in its corresponding Satellite Orbit, which should include the following:
- a. Date of arrival at the Satellite Orbit;
  - b. Date of Bringing into Operations;
53. The Institute will supervise the compliance of the Replacement Plan once the term established in the previous paragraph has expired or once the Orbital Resources Concessionaire submits the information and documentation.
54. In case that the replacement Satellite is subject to De-orbiting, the Orbital Resources Concessionaires should submit before the Institute the corresponding request as indicated in Section II of this Chapter.

## **Section II De-orbiting**

55. Orbital Resources Concessionaires should submit an authorization application to the Institute for the De-orbiting of Satellites of the National Satellite Systems, for which they should indicate the following:
- a. Estimated start date of De-orbiting;
  - b. De-orbiting description, which should be in compliance with the international regulations and best practices.

The Institute will resolve about the petition within the term of 30 business days after the authorization application is submitted. In case that the Institute does not resolve within the term mentioned before, the De-orbiting will be considered authorized.

56. Orbital Resources Concessionaires should take the necessary preventive measures to avoid causing damage or affectations to other Satellite Systems during the De-orbiting, as well as keeping the Institute and the Ministry informed of any event that may affect other Satellite Systems or cause damage to third parties.

Satellites for which at the time of the filing to obtain the Orbital Resources Concession were accredited that they do not require De-orbiting, will be exempted from the authorization for De-orbiting.

57. Once the De-orbiting is finished, within the following 10 business days, the Orbital Resources Concessionaires should submit to the Institute a report of the result regarding the De-orbiting process.

### **Section III Relocation**

58. Relocation to another Satellite Orbit registered before the ITU on behalf of the Mexican Administration, will be processed considering the following:

- i. For the Relocation to another GOP or Satellite Orbit, granted to the same Orbital Resources Concessionaire, the petitioner should submit before the Institute a Relocation application, indicating the measures that will be taken into account to preserve the assigned Orbital Resource from which the Satellite will be relocated, as well as to guarantee service provision continuity.

If the Orbital Resources Concessionaire is not in the case indicated in Section I of this Chapter for the submission of the Replacement Plan, it should be submitted at least 60 business days prior to the estimated date of starting the Relocation process.

- ii. For the Relocation to another GOP or Satellite Orbit in Concession granted to different Orbital Resources Concessionaires, in addition to what was stated in the previous paragraphs, the agreement between the parties shall be attached to the request.

59. In the case of Relocation to another GOP or Satellite Orbit of a foreign Administration Satellite Network, the Orbital Resources Concessionaire should submit an application before the Institute, at least 30 business days before starting the Relocation. Relocation will only be admissible when at least one operational Satellite is retained in the Orbital Resource assigned to the Mexican Administration.

It is the responsibility of the Orbital Resources Concessionaires to follow the formalities and procedures that the Administration responsible for the destination Satellite Orbit establishes. In no case the Mexican Administration will be responsible for the Satellite operations in the destination Orbital Position or Satellite Orbit.

## **Section IV**

### **Co-location and Inclined Orbit Operation**

60. For the Operation in Inclined Orbit, the Orbital Resources Concessionaires shall submit to the Institute an application, indicating the causes, characteristics and conditions to which the Satellite operation will be subjected, as well as the estimated time that will operate under those conditions, considering the sufficient fuel reserve or energy for subsequent De-orbiting.
61. The characteristics and conditions under which the Operation in Inclined Orbit will be carried out, should be in accordance with the applicable regulations and international best practices.
62. The Institute may authorize the Operation in Inclined Orbit, taking into account the duly justified proposal of the Orbital Resources Concessionaire, the estimation of the satellite manufacturer, the continuity of the service, the remaining fuel and/or the technology that guarantees the Satellite operation and its subsequent De-orbiting.
63. For the Co-location, the Orbital Resources Concessionaires should submit an application before the Institute, indicating the characteristics and conditions under which the Satellites will operate. The application should be in compliance with the applicable regulations, to the best international practices and should not affect the continuity and quality in the provision of the services.

## **Section V**

### **Abroad Control and Operation Center Temporary Operation**

64. The Orbital Resources Concessionaires should submit an application for the temporary operation of a Control and Operation Center located abroad, due to fortuitous cases or force majeure. The Institute will resolve within 60 business days after the business day following the submission of the application.
65. The operation of a Control and Operation Center located temporarily abroad due to fortuitous or force majeure cases should not affect continuity and quality in the provision of services in Mexico and should not modify the technical characteristics authorized in the Orbital Resources Concession title.
66. The temporary Control and Operation Center should be located within the Service Area of the Satellite Network Filing, in an area that has a line of sight towards the Satellite, which guarantees the optimal technical conditions of operation of the Satellite System, as well as free of harmful interference.

67. On an exceptional basis and for the Institute consideration, the Control and Operation Center may be temporarily located abroad, outside the Service Area on the basis of not causing harmful interference and without protection rights. For those cases, the Orbital Resources Concessionaire should carry out the necessary procedures and notices to the corresponding Administrations, in relation to the temporary use of the Frequency Bands, the Control and Operation Center installation and the possible harmful interferences that could be caused.

In case of causing harmful interference to other national or foreign radiocommunication services, due to the operation of the Control and Operation Center located outside the Service Area, the Orbital Resources Concessionaire should, when appropriate, cease the management of the Satellite System from the Control and Operation Center, and use another one located within the Service Area of the Satellite System.

68. The Institute will establish the period and conditions under which the temporary location abroad of the Control and Operation Center will be authorized.

### **Chapter III**

#### **Foreign Satellite Systems Operation**

69. Landing Rights Authorization shall be processed in accordance with the provisions of the Authorization Rules.

70. The Landing Rights Authorization titles will contain, among others, the following elements:

- Service Area
- Technical specifications of the Foreign Satellite Systems
- Date of Bringing into Operations
- Possibility for the Institute to grant other concessions or authorizations in the same Frequency Bands

71. To request a Landing Rights Authorization, the Satellite Networks Filing related with the requested Satellite Systems must be at least in Coordination and contemplate in their Service Area the part of the national territory where the Frequency Bands associated with the Satellite Network Filing are pretending to be exploited.

If the Satellite that will provide the Satellite Capacity maintains an Operation in Inclined Orbit, this should be indicated in the application, as well as, where appropriate, the estimated Lifetime.

If there is an agreement, contract or any other deal signed by Administrations and Satellite Operators for the shared use of the Frequency Bands subject to the request for Landing



Rights Authorization, the Institute shall limit the Frequency Bands in the authorization title, as long as the Satellite Network Filing parameters are not exceeded.

The Landing Rights Authorization may be granted by the Institute regarding to one or more Frequency Bands associated with the Foreign Satellite System.

- 72.** The Institute will not grant a Landing Rights Authorization when a Satellite Network Filing has been identified by the ITU as possibly affecting National Satellite Systems in Frequency Bands that are pretended to be exploited in Mexico, unless there is a coordination agreement ratified by the Mexican Administration or a favorable opinion of the Ministry.

Nevertheless, when the GOP is at a longer distance in the geostationary orbital arc with respect to the National Satellite Systems than the one stipulated in the RR for coordination in unplanned fixed satellite service Frequency Bands, the coordination agreement may be requested to the Ministry without the need to coordinate the Frequency Bands with the Orbital Resources Concessionaires supposedly affected. When for these Frequency Bands in the RR no distance in the orbital arc is specified, a Coordination of the Frequency Band in question should be carried out in accordance with the first paragraph of this numeral.

- 73.** The Landing Rights Authorization Holders whose Satellite Network Filing was in Coordination at the time of its authorization and the Notification had not complied with the procedures and terms established by the ITU, should request to the Institute its modification, in order to eliminate the Frequency Band or the Satellite Network Filing that is in that situation, within a period of 30 business days from the respective ITU publication.
- 74.** The Landing Rights Authorization Holders with a Landing Rights Authorization, whose Satellite Network Filing is in Coordination, should notify the Institute when the Satellite Network Filing under which the corresponding authorization was granted complies with the Notification according to the procedures and terms established by the ITU, within a period of 30 business days from the respective ITU publication.
- 75.** The Institute, ex officio, may review the current status of the Satellite Networks Filing of the Foreign Satellite Systems authorized by the Institute.

If from the review of the status of the Satellite Networks Filing it is identified that the procedures and terms established by the ITU were not met, the Institute shall require the Landing Rights Authorization Holder for clarification and information proving the current status of the Satellite Networks Filing.

If it is confirmed that the Satellite Network Filing did not comply with the Notification before the ITU for one or more Frequency Bands or was suppressed from the Master International Frequency Register, the Institute shall eliminate from the Landing Rights Authorization the Frequency Band or the Satellite Network Filing that is in such case, making the

corresponding note in the Concession Public Registry. In these cases, the Landing Rights Authorization Holder should take the necessary measures so that the Satellite Capacity Provision Service that is offered can be provided by another Satellite, either of their own Satellite Network Filing or of a third party, to guarantee continuity in the provision of services.

**76.** Landing Rights Authorizations may be total or partially terminated by:

- i. Expiration of the validity term of the Landing Rights Authorization, unless its renewal;
- ii. Resignation of the Landing Rights Authorization Holder;
- iii. Revocation of one or more Frequency Bands of those established in the Landing Rights Authorization, under terms of Article 303 of the Law;
- iv. Recovery of one or more Frequency Bands of those established in the Landing Rights Authorization;
- v. Elimination of one or more Frequency Bands of the Satellite Network Filing, under terms of numeral 75 of the Regulatory Provisions, or
- vi. The dissolution or bankruptcy of the Landing Rights Authorization Holder.

In the case of partial termination of the Landing Rights Authorization, the corresponding notice should be added to the Concessions Public Registry.

The Landing Rights Authorization Holders should not continue exploiting the Frequency Bands in Mexico included in the cases indicated in this numeral.

The Institute shall notify in advance to the Landing Rights Authorization Holder the termination of the Landing Rights Authorization, so migration of its users and possible affectations due to the interruption of the service can be anticipated. In this regard, if necessary, the Institute may authorize the temporary use of radio spectrum only in the amount and for the strictly necessary time, so the Landing Rights Authorization Holder migrates the users of the Satellite Capacity Supply Service to another Satellite, in order to provide continuity in the provision of services.

**77.** When the Satellite Network Filing is modified before the ITU and this impacts the authorized parameters in Mexico, the Landing Rights Authorization Holders should submit an application for the authorization modification to the Institute.

**78.** The Institute may grant Landing Rights Authorizations on Frequency Bands subject to an authorization, with the obligation of not causing harmful interference to the previously

authorized Satellite System. When coexistence in the provision of services is not technically feasible, the authorization will be denied.

79. The Bringing into Operations of the Foreign Satellite Systems should be carried out within the first 18 months of the term of validity of the Landing Rights Authorization. This period may be extended by the Institute for up to equal periods due to a duly justified cause.
80. When an Administration pretends to include the Mexican territory in the Service Area of a Satellite Network Filing, it should carry out the corresponding procedures before ITU in accordance with its provisions, as well as obtain the approval of the Ministry.
81. In the case of feeder links (Earth-to-space) for TT&C operations, Satellite Operators will not require a Landing Rights Authorization, under the basis of not causing harmful interference and without protection rights. In case of causing harmful interference to other national or foreign radiocommunication services due to the Control and Operation Center operation, it should attempt and, where appropriate, cease the Satellite System management.

## **Chapter IV Earth Stations**

### **Section I Transmitting Earth Stations Operation**

82. Transmitting Earth Station Authorizations shall be processed according to the Rules for Authorizations. The Satellite System associated to a request of Transmitting Earth Station Authorization shall be under a valid Landing Rights Authorization or Orbital Resources Concession, except for the stated in numerals 81, 87 and 100 of the Regulatory Provisions.
83. Transmitting Earth Station Authorizations titles shall contain, among others, the following elements:
  - Service to be provided.
  - Operating conditions of the Transmitting Earth Stations.
  - Possibility for the Institute to grant other authorizations in the same Frequency Bands and location, as long as no harmful interference is noticed.
  - Technical Characteristics of the Transmitting Earth Station.
84. Transmitting Earth Stations should have the sufficient technical elements to enable the temporary cessation of emissions when it is determined that there is harmful interference to another Satellite System or terrestrial telecommunications system. Likewise,

Transmitting Earth Station Authorization Holders shall comply with that stated in the Title Eighth of the Law and the applicable administrative provisions.

**85.** In the case of harmful interferences caused by Transmitting Earth Stations located in Mexico to telecommunication services located outside the Mexican territory, the Institute shall notify the Transmitting Earth Station Authorization Holder, which shall:

- i. Submit before the Institute a report of the technical parameters which the Transmitting Earth Station operates.
- ii. Collaborate with the Institute if technical coordination is needed in order to mitigate the harmful interference.
- iii. Provide to the Institute all the information required to carry out the technical coordination.

Taking into account what is described in the previous numerals, the Institute could determine new operating conditions, or even the partial or total cessation of emissions from the Transmitting Earth Station.

**86.** In the case of harmful interferences caused by telecommunication systems located outside Mexico, the Transmitting Earth Station Authorization Holder should provide the information and documentation for the Institute to initiate the corresponding procedure under the provisions of Section I, Chapter I of Title Three of the Regulatory Provisions.

**87.** The Institute could grant a Transmitting Earth Station Authorization associated to a Satellite System that does not have Mexico in its Service Area, only for feeder links (Earth-to-space) for control and monitoring operations, under the numeral 81 of the Regulatory Provisions. In such case, the Transmitting Earth Station shall not cause harmful interference to other radiocommunication systems or services and cannot claim protection against harmful interference caused by them.

**88.** Transmitting Earth Stations that use VSAT and those identified as End User terminal equipment for satellite telephony, with massive and/or ubiquitous deployment, could operate under just one Transmitting Earth Station Authorization previously granted, without the need to submit a modification request for each Transmitting Earth Station to be added. Such operation should not cause harmful interference and cannot claim protection against harmful interference caused by other radiocommunication systems under a concession or authorization. The foregoing without prejudice of the compliance with the conformity evaluation process regarding equipment homologation.

The case mentioned above will only take place when the use of the Frequency Bands of interest do not affect the operation of other services allocated on a primary basis in the

same Frequency Band, except if the allocation on a primary basis is subsequent to the granting of the Transmitting Earth Station Authorization, in which case the Institute shall resolve about its applicability by giving priority to the efficient use of the radio spectrum and the coexistence of services.

In these situations, Transmitting Earth Stations operating under the previously granted Transmitting Earth Station Authorization shall be subject to the obligations and conditions established in it, as well as the applicable regulations. Every six months Transmitting Earth Stations Authorization Holders should submit to the Institute a report containing, among other data the number of stations and in the case of fixed Transmitting Earth Stations, the location of those stations.

- 89.** When a Frequency Band is allocated only to Satellite Services, all those Transmitting Earth Stations that comply with the same technical operation characteristics, even with a different location, could operate under a Transmitting Earth Station Authorization granted by the Institute. Such operation shall be subject to the condition of not causing harmful interference to other radiocommunication systems under a concession or authorization. The foregoing, in compliance with the conformity evaluation process regarding equipment homologation.

In these cases, Transmitting Earth Stations operating under the previously granted Transmitting Earth Station Authorization shall be subject to the obligations and conditions set out on it, as well as the applicable regulations. Every 6 months Transmitting Earth Stations Authorization Holders should submit to the Institute a report containing, among other data, the number of stations and the location of the Transmitting Earth Stations.

- 90.** Control and Operation Centers of the National Satellite Systems could be used or shared as Transmitting Earth Stations associated to Foreign Satellite Systems under a Landing Rights Authorization title.

- 91.** Transmitting Earth Station Authorizations may be total or partially terminated for any of the following causes:

- i.** Expiration of the validity term of the Transmitting Earth Station Authorization, unless its renewal;
- ii.** Resignation of the Transmitting Earth Station Authorization Holder;
- iii.** Expiration of the validity term of the Landing Rights Authorization that provides the space segment;
- iv.** Cease of operations at the Institute request due to harmful interference, which could not be mitigated;

- v. The dissolution or bankruptcy of the Transmitting Earth Station Authorization Holder; or
- vi. Revocation under terms of Article 303 of the Law.

In case of partial termination of the Transmitting Earth Station Authorization, the corresponding note shall be made on the Concessions Public Registry.

## **Section II**

### **Transmitting Earth Stations Exempted from the Authorization Process**

- 92. Transmitting Earth Stations on board of aircrafts, with a foreign registration, shall be exempted from Transmitting Earth Station Authorization as long as their operation is during the flight over Mexican territory. Such stations shall operate under applicable international and national regulations and under the basis of not causing harmful interference to satellite or terrestrial radiocommunication systems under a concession or authorization.
- 93. Transmitting Earth Stations on board vessels of the Global Maritime Distress and Safety System ships shall be exempted from Transmitting Earth Station Authorization when they are in Mexican territorial waters, as long as they operate under the applicable national and international regulations.

## **Section III**

### **M2M Satellite Communication Devices**

- 94. For the operation and deployment of M2M Satellite Communication Devices, a Transmitting Earth Station Authorization is not needed, they just should meet homologation requirements, accordingly with the operation and technical parameters established by the Institute in a homologation certificate.
- 95. The M2M Satellite Communication Devices may only operate in the Frequency Bands allocated to Satellite Services under a Landing Rights Authorization or an Orbital Resource Concession.
- 96. The M2M Satellite Communication Devices operation should not cause harmful interference to telecommunication or broadcasting services under a concession or authorization, nor claim protection from harmful interference from them or other M2M Satellite Communication Devices.

97. If the Institute has notice that the operation of an M2M Satellite Communication Device is causing harmful interference it will take the necessary actions to verify it and where appropriate, resolve such interference.

## **Title Four**

### **Other Provisions related to Satellite Network Filings**

#### **Chapter I**

#### **Spacecrafts**

98. Spacecrafts shall operate under a national or foreign Satellite Network Filing.
99. For the operation of a Spacecraft under a national Satellite Network Filing, the interested party should apply to the mechanism for obtaining Orbital Resources as it is stated in Chapter III of Title Two of the Regulatory Provisions. For this, the interested party shall indicate in the application request that the purpose is for using a Spacecraft associated to an Orbital Resource.
100. For the operation of Spacecraft under a foreign Satellite Network Filing that require communication links with Earth Stations located in Mexico, no Landing Rights Authorization is needed. However, such operation shall be carried out in the Frequency Bands allocated for that purpose in the CNAF.

#### **Chapter II**

#### **Short-Duration Mission Service**

101. Orbital Resources for Short-Duration Mission Service could be obtained based on the procedure provided in Chapter III of the Title Two of these provisions. For this purpose, the interested parties should indicate in their application that the purpose is for a short-duration mission.
102. Satellite Systems for Short-Duration Mission Service shall operate preferably in Frequency Bands identified for this type of service in the CNAF.
103. Short-Duration Mission Service may operate in Frequency Bands identified as free spectrum, in accordance with the parameters set forth in the applicable provisions.
104. The radio-amateurs interested in obtaining an Orbital Resources Concession for Short-Duration Mission Service to operate in Frequency Bands allocated and/or enabled for the

amateur satellite service as is stated in the RR, shall get previously a Frequency Bands coordination before the IARU, taking into account the established terms and procedures.

Once such coordination and the consideration for the occupation priority of the Orbital Resource has been obtained before the ITU, the interested party may submit to the Institute the application to obtain the respective concession in accordance to the Concession Guidelines, attaching the coordination agreement document from the IARU and a commitment letter to comply with the Notification.

- 105.** In the case of a request for an Orbital Resource for Short-Duration Mission Service in Frequency Bands subject to Coordination, in addition to complying with the Regulatory Provisions, it shall fulfill the procedures, terms and provisions established by the ITU.
- 106.** For the Orbital Resources Concession for Short-Duration Mission Service, the Replacement Plan and the Contingency Plan referred to in the Regulatory Provisions are not needed.
- 107.** To determine the term of validity of the Orbital Resources Concession for Short-Duration Mission Service, the Institute will take into account the term of validity of the Satellite Network Filing.
- 108.** The procedure for granting the Orbital Resources Concession for Short-Duration Mission Service will be carried out in accordance to the Concession Guidelines.
- 109.** Short-duration missions Satellites that, due to their technical and technological characteristics, have the capabilities to disintegrate while entering the atmosphere and minimize the environment impact in compliance with national and international regulations, will be exempted from the De-orbiting authorization. For this purpose, the Orbital Resources Concessionaires for Short-Duration Mission Service shall provide to the Institute all the information to support such exception.

However, the Orbital Resources Concessionaires for Short-Duration Mission Service should comply with the international regulations and best practices, considering the provisions of the applicable recommendations. At the same time, these Orbital Resources Concessionaires shall take the necessary measures to avoid causing damage or affectations to other Satellite or aeronautical systems during the re-entry of the Satellite into the atmosphere and should keep the Institute informed of any event that may cause damage to third parties.

- 110.** To communicate with Foreign Satellite Systems in Frequency Bands allocated to the amateur or amateur satellite service, identified as short-duration missions, no Landing Rights Authorization or Transmitting Earth Station Authorization will be required, under the bases of not causing harmful interference and without protection rights. In this case, a Private Use Concession for amateur radio purposes will not be required.



## **Chapter III**

### **Ancillary Terrestrial Service**

- 111.** The elements of the Ancillary Terrestrial Component should be compatible with the network and infrastructure elements of the Satellite System, regardless of the available technology; in other words, the elements of the Ancillary Terrestrial Component should be connected without any physical or logical constraints to the Satellite System network elements, so both networks can coexist.

The Satellite System should have at least, the following elements:

- Function policy server between the terrestrial component and the satellite component;
- Central database server of the system;
- Signaling or control server;
- Service interface between access network and central network;
- Service interface for external networks;
- Policy, quality of service and pricing server;
- Real-time control and optimization server for the use of the Satellite System and the Ancillary Terrestrial Component resources.

Any product, equipment, device or component that uses, enjoys or exploits the Frequency Bands subject to the radio spectrum concessionaire for the provision of the Ancillary Terrestrial Service should be homologated prior to its installation and operation, in accordance with the provisions of the Law.

In the case that the radio spectrum concessionaire needs to modify the elements listed above, it may request it to the Institute, providing the necessary information to support that the operation and coexistence of the Satellite System and the Ancillary Terrestrial Component will be guaranteed.

- 112.** The Frequency Bands subject to a radio spectrum concession for the Ancillary Terrestrial Service should be used for the provision of such auxiliary service, which is linked to a Satellite Service.

Based on the foregoing, the Ancillary Terrestrial Service operations carried out should complement and coexist with the Satellite Service operations associated with the respective Orbital Resources Concessions or Landing Rights Authorizations.

- 113.** In case that the Ancillary Terrestrial Component operates, due to some extraordinary situation, independently of the Satellite Service, the following should be observed:

- a. In the event of a failure in the Satellite System that does not allow the provision of the Satellite Service associated to the Ancillary Terrestrial Service, the radio spectrum concessionaire that provides the Ancillary Terrestrial Service shall notify to the Institute within 30 calendar days after such failure, adding evidence of the communication with the ITU. The radio spectrum concessionaire may continue operating under this circumstance for up to 24 months counted from the event that constrain the operation associated with the Satellite System.
- b. In the event of any other circumstance that does not allow the provision of the Ancillary Terrestrial Service associated with the Satellite System, the radio spectrum concessionaire that provides the Ancillary Terrestrial Service should notify the Institute within 10 business days after such event occurs. Likewise, the radio spectrum concessionaire may continue operating for up to 12 months, counted from the event that constrains the operation associated with the Satellite System.

The lack of notice to the Institute by the radio spectrum concessionaire that provides the Ancillary Terrestrial Service, in any of the above cases, will be subject to the corresponding sanction, in accordance with the provisions of the Law.

- 114. The radio spectrum concessionaire for the Ancillary Terrestrial Service should have the sufficient technical elements that allow the cease of emissions, in case of not having an associated Satellite Capacity.
- 115. The operation of the network and the system elements of the Ancillary Terrestrial Component will be subject to not causing harmful interference that constrains the networks operation and services provided in Mexico in the same segment of the Frequency Band in which it operates, as well as in the adjacent Frequency Bands.

In case of possible harmful interference, including the border areas of Mexico, technical coordination procedures should be carried out to guarantee the proper functioning of the telecommunications services operating in the segment of the Frequency Band and adjacent Frequency Bands.

- 116. The radio spectrum concessionaire that provides the Ancillary Terrestrial Service for commercial or private use for private communication purposes, may only cede or lease the radio spectrum for the same service enabled in the concession title.

### **Transitory Provisions**

**First.-** Regulatory Provisions on Satellite Communication will come into force the day after its publication in the Official Gazette.

**Second.-** Articles 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28 first and third paragraphs, 30, 31, 32, 34, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45 and 46 of the Satellite Communication Regulations are repealed.

**Third.-** Regulatory Provisions on Satellite Communication shall be reviewed within a period of no more than five years, in order to assess their correspondence with the technical, technological and regulatory advances of the sector.

**Fourth.-** Orbital Resources title holders shall present, if they have not done it, the Contingency Plan and the Replacement Plan in accordance with the stated in the Title Three, Chapter I of Regulatory Provisions on Satellite Communication, within 120 business days counted from the day following their entry into force.

**Fifth.-** Landing Rights Authorization Holders should present the Contingency Plan, in case they have not presented it before, in accordance with the provisions of Title Three, Chapter I of Regulatory Provisions on Satellite Communication, within 120 business days counted from the day following their entry into force.

**Sixth.-** Landing Rights Authorization Holders whose authorizations were granted when the Satellite Network Filing was in Coordination, will have a period of 90 business days counted from the entry into force of the Regulatory Provisions on Satellite Communication, to notify the Institute if that Satellite Network Filing complied with the Notification before the ITU.

**Seventh.-** Concessionaires whose concessions consider the right to exploit the rights of emission and reception of signals and Frequency Bands associated to Foreign Satellite Systems that cover and can provide services in Mexico granted prior to the entry into force of the Law, shall be governed by the provisions regarding Landing Rights Authorizations in Regulatory Provisions on Satellite Communication.

**Eighth.-** Permit holders whose permits consider the right to install, operate or exploit earth stations to transmit satellite signals, granted prior to the entry into force of the Law shall be governed by the provisions regarding Transmitting Earth Stations Authorizations in Regulatory Provisions on Satellite Communication.

**Ninth.-** The Institute shall make the modifications to the Concessions Guidelines and Rules of Authorization, within a period of 180 business days from the date of publication of Regulatory Provisions on Satellite Communication in the Official Gazette.