Regulations for Commercial Satellite Services and Landing Rights in Afghanistan

Section 1
GENERAL PROVISIONS

1. DEFINITIONS
In these Regulations, unless the context indicates otherwise a word or expression to which a meaning has been assigned in the Telecom Law or the Regulation for the Use of Radio Frequencies and Radio Communications Equipment in Afghanistan, has the meaning so assigned:

“Applicant” means any person that submits a completed application form to ATRA in terms of Regulation 6;

“ATRA” means the Afghanistan Telecommunication Regulatory Authority;

“Bandwidth Reseller” means a vendor who sells satellite capacity;

“Carrier to Interference ratio C/I” means the ratio of unfaded signal power to the noise-equivalent value of interference;

“Change in Control” means any transaction, sale, contract, recapitalization or other reorganization or merger that results in a Change in Control of the Licensee, including any transaction or series of transactions taking place after the date of this License as a result of which the holders of the voting securities or equity interests in the capital of the company immediately after its establishment, hold less than a majority of the voting power or equity interest in the Licensee after the transaction;

“Commercial satellite” means a satellite launched for profit making or business purpose;

“Control” means the ownership of more than 50% of the voting interests in any person and/or the ability to control in fact the business and affairs of that person whether by ownership, contract, or otherwise;
“Corporations and Limited Liability Companies Law (CLLCL)” provides Afghanistan with the legal rules for the organization of business enterprises in Afghanistan;

“Customer” means any person who has entered into a contract with the Licensee to receive the Licensed Services;

“Direct-Broadcast Satellite Television (DBSTV)” refers to satellite television systems in which the subscribers, or end users, receive signals directly from geostationary satellites. Signals are broadcast in digital format at microwave frequencies.

“Direct-To-Home (DTH)” Broadcasting Service refers to the distribution of multi channel TV programs in the Ku Band by using a satellite system by providing TV signals directly to subscribers’ premises.

“Earth Exploration Satellite” means any satellite that provides pictures or images;

“Earth Station” means a station located either on the earth's surface or within the major portion of the earth’s atmosphere and intended for communication with one or more space stations; or with one or more stations of the same kind by means of one or more reflecting satellites or other objects in space;

“Earth Station Provider” means the owner of an Earth Station;

“Effective Isotropic Radiated Power (EIRP)” means the amount of power that a theoretical isotropic antenna would emit to produce the peak power density observed in the direction of maximum antenna gain;

“Emergency Call” means a call made to designated emergency numbers such as police, fire, ambulance or other emergency services designated by ATRA;

“End-User” means any person including a Customer who receives Licensed Services from the Licensee;

“Equivalent Isotropically Radiated Power (e.i.r.p.)” The product of the power supplied to the antenna and the antenna gain in a given direction relative to an isotropic antenna (absolute or isotropic gain).

“Feeder Link” is a radio link from an Earth Station at a given location to a space station, or vice versa, conveying information for a space radiocommunication service other than for the fixed-satellite service. The given location may be at a specified fixed point, or at any fixed point within specified areas;

“Fixed-Satellite Service (FSS)” is a radiocommunication service between earth stations at given positions, when one or more satellites are used; the given position may be a specified fixed point or any fixed point within specified areas; in some cases this service includes satellite-to-satellite links, which may also be operated in the inter-satellite service; the Fixed-Satellite Service may also include feeder links of other space radiocommunication services;

“Geo-Stationary Orbit (GSO)” means a satellite location at 36,000 km above sea level, where an earth satellite has a period of revolution equal to the period of rotation of the Earth about its axis;
“Global Mobile Personal Communications Systems (GMPCS)” is a personal communication system providing transnational, regional or global coverage from a constellation of satellites accessible with small and easily transportable terminals;

“High Altitude Platform Station (HAPS)” stands for a station located on an object at an altitude of 20 to 50 km and at a specified, nominal, fixed point relative to the Earth;

“Highly Elliptical Orbit (HEO)” is an elliptical orbit most typically with a perigee of 500 km or more and a apogee of 50 000 km or less altitude above the Earth’s surface with an inclination angle greater than 40° from the equatorial plane;

“International Data Access (IDA)” means the process of linking data networks in Afghanistan to the global Internet highway or other managed packet-switching IP-based international networks.

“International Gateway” means an Earth Station established in Afghanistan to provide a communications link between the Licensed Network and the Telecommunications Network of operators outside Afghanistan;

“International Telecommunication Union (ITU)” is the United Nations specialized agency for information and communication technologies – ICTs. It allocates global radio spectrum and satellite orbits and develops the technical standards that ensure networks and technologies seamlessly interconnect;

“ITU Radiocommunication Sector (ITU-R)” is one of the three sectors (divisions or units) of the International Telecommunication Union (ITU) and is responsible for radio communication;

“License” means any of the authorizations for Commercial Satellite Services, as categorized in Regulation 4;

“Licensed Network” means the Public Telecommunications Network used to provide Commercial Satellite Services;

“Licensed Service” means a public telecommunications service authorized to be provided via the Licensed Network;

“Licensee” means the person who has obtained one or more Licenses to provide Commercial Satellite Services, pursuant to the procedures outlined in Regulation 6;

“Low-altitude Earth Orbit (LEO)” means a satellite circular or elliptical orbit of about 700 to 3 000 km altitude above the Earth’s surface;

“Medium Earth Orbit (MEO)” stands for a satellite circular or elliptical orbit of about 8 000 to 20 000 km altitude above the Earth’s surface. Satellites in this orbit travel higher than Low-altitude Earth Orbit (LEO) satellites, but lower than geostationary satellites;

“Military satellite” means a satellite with payload for military applications;

“National Frequency Allocation Table (NFAT)” is the table of allocation for use of frequencies and frequency bands in the Islamic Republic of Afghanistan, developed and maintained by ATRA;

“Notification Date” means the date upon which ATRA receives a completed application form with relevant supporting documents;
“Power Flux Density (PFD)” is the amount of power flow through a unit area within a unit bandwidth. The units of power flux density are those of power spectral density per unit area, namely watts per hertz per square meter. These units are generally expressed in decibel form as dB(W/Hz/m²), dB(W/m²) in a 4 kHz band, or dB(W/m²) in a 1 MHz band.

“Public Protection and Disaster Relief (PPDR)” radiocommunications are those used by agencies and organizations dealing with the maintenance of law and order, the protection of life and property and with emergencies, as well as with serious disruptions to the functioning of society that pose a significant and widespread threat to human life, health, property or the environment.

“Radio Navigation Satellite” means any satellite that uses radio frequency to provide location-based services;

“Regulatory Framework” means the regulations, decisions, directives, regulatory policies, guidelines, recommendations and procedures made by ATRA from time to time including any revisions or amendments made to them;

“Space Research Satellite” means any satellite for scientific research;

“Space Segment” means any satellite station in orbit;

“Space Segment Provider” means an owner of a satellite in space;

“Telecom Law” means the Telecommunications Services Regulation Law, published on 08/10/2005 in the Official Gazette No. 863, as amended;

“Terminal” means the equipment used by Customers to access the Licensed Service;

“Transponder” means the Transmit/Receive part of a satellite and microwave repeaters carried by a communications satellite;

“Transportable Earth Station (TES)” is a stand-alone, complete and fully autonomous mobile earth station;

“Type Approval” means a process by which Equipment or a device or system is authorized by ATRA to be used in Afghanistan or imported into Afghanistan and involves verification of the Equipment’s compliance with the applicable standards and other regulatory requirements;

“Very Small Aperture Terminal (VSAT)” means any small two-way fixed satellite Earth Station used to link to satellites operating in C, Ku and Ka bands with a dish antenna that is smaller than 3 meters;

2. OBJECTIVE OF REGULATIONS

The objectives of these Regulations shall be:

(a) To ensure a well developed and organized satellite communications market in Afghanistan with appropriate legal framework that meets international best practices, encourages innovation and guarantees public safety in the rendering of Commercial Satellite services.

(b) To manage scarce frequency resource, especially in bands where satellite shares frequency with terrestrial systems and to encourage the use of satellite
connectivity to underserved areas that lack terrestrial transmission infrastructure backbone.

(c) To encourage the use of satellite communication infrastructure in Afghanistan as a means of providing long-haul transmission facilities and ensure that investors are adequately protected.

(d) To provide guidelines for protection from impermissible levels of interference to reception of signals by Earth Stations in the Fixed/Mobile Satellite Service from terrestrial stations in a co-equally shared band.

(e) To ensure that satellite Space Segment Providers provide reliable, cost-effective and secured service to users in Afghanistan under fair and favorable commercial and technical conditions. This provision, by extension, covers associated players in the supply chain as well as Earth Station and Mobile Satellite Service Providers, Bandwidth Re-sellers, Broadcast Satellite Service Providers and vendors of terminal equipment or franchise holders.

(f) To ensure a standard means of obtaining accurate records of all users of Commercial Satellite services in Afghanistan in order to simplify and facilitate interference resolution among Satellite Service Providers, or between satellite and terrestrial systems.

(g) To ensure regular update of facilities’ database for use in processing satellite coordination requests from neighboring countries, International Telecommunications Union (ITU), regional telecommunications organizations and regulatory authorities in other countries.

(h) To ensure that the general public and workers in telecom companies are well protected from possible health hazards that can arise from over exposure to high-level electric fields at high frequencies.

3. **SCOPE**

The provisions of these regulations apply only to the following:

(a) Commercial Satellite Services, i.e. those who provide service to third parties or who own satellite Space Segments or Earth Station for self-provision support of their businesses.

(b) Space Segment Providers, Earth Station Providers, Bandwidth Resellers, International Data Access (IDA) operators, Global Mobile Personal Communications Systems (GMPCS) Providers, Direct-Broadcast Satellite Television (DBSTV) Providers and suppliers of user terminal.

(c) GSO and non-GSO satellites including LEO’s, MEO’s, HEO’s, HAPS, and other similar orbits that may be developed in future.

(d) Those already providing services to Afghan users prior to the release of this Policy and future Commercial Satellite Service providers.

For avoidance of doubt, all military and non-commercial Afghan Government satellites or those operating under government agreement are outside the scope of these regulations. Equally, Radio Navigation Satellites, armature satellites, Earth Exploration and Space Research Satellites.
4. CATEGORIES OF LICENSES

The following categories of licenses are defined in these regulations:

(a) Category A: Space Segment Providers.
(b) Category B: Bandwidth Resellers, including VSAT operators.
(c) Category C: Earth Station License (EIRP above 0.5 kw/100 w including Hub Stations).
(d) Category D: Transportable Earth Stations (TES).
(e) Category E: Global Mobile Personal Communications Systems (GMPCS).
(f) Category F: Direct-Broadcast Satellite Television (DBSTV).
(g) Category G: Sales and Installation of Terminal Equipment.

An applicant/operator may at any time apply for one or more category(ies) of license.

All VSAT hubs, nodes or remote sites capable of providing two-way communications must be registered with ATRA, but do not require a license if power output is less than 100w. Even though DBSTV Service Providers are required to have a license for Commercial Satellite services, individual receive-only satellite stations do not require any license.

5. ANCILLARY AUTHORIZATIONS

Commercial Satellite Service Licensees might require additional authorizations in order to provide the services. The types of ancillary authorizations required for each category are indicated in Annex 1 - Categories of Commercial Satellite Services. They are:

(a) Ground Segment Authorization: Categories B, C, D and E.
(b) Service Provider License: Categories B, C, D, E and F.
(c) Spectrum Permit: Categories A, B, C, D and E.
(d) Registration: Categories A, B and G.

These ancillary authorizations will be granted to the Commercial Satellite Service Licensee once all steps required for processing the license request have been fulfilled, depending on the particular Satellite Network characteristics and the applicant’s specific requests.

6. LICENSING PROCESS

Applicants wishing to obtain a license for Commercial Satellite Services in Afghanistan must follow the general process outlined in this regulation. The general licensing application process for all categories of Commercial Satellite Services is shown in Annex 2 - Licensing Application Process. It consists of the following steps:

(a) The applicant identifies the requirements applicable to the particular category(ies) of License.
(b) The applicant obtains and completes an application Form and submits it to ATRA with the required documents for each particular category.
(c) ATRA reviews the application and documentation and informs the applicant within fifteen (15) working days after the Notification Date whether it is complete or not.

(d) Should international coordination be required, the applicant shall be informed and ATRA will initiate it following the specific provisions outlined in Regulation 21.

(e) Should authorization for landing rights be required, the applicant shall be informed and ATRA will follow the specific provisions outlined in Regulation 22.

(f) ATRA will assign frequency permits if required, in accordance to the National Frequency Allocation Table (NFAT) and Annex 3 - List of Sub-Bands of FSS and BSS Spectrum.

(i) Should the required frequencies not be in conformance, the application will be returned to the applicant within ten (10) working days for modification and resubmittal.

(ii) Otherwise, ATRA will update the Spectrum Usage database and request payment of the applicable fees to the applicant within ten (10) working days, as they shall apply according to Regulation 47.

(iii) Should additional fees apply as a result of ancillary services being requested/required, they shall also be added to the payment request.

(g) ATRA will assign call signs and update the Call Sign database in case they are required, within ten (10) working days.

(h) Once the applicant submits proof of payment in full, ATRA shall update the License database, prepare the applicable license(s) in accordance to the request and submit them to the Licensee within fifteen (15) working days.

7. LICENSING CRITERIA

Licensing of Earth Stations, Space Segments, VSAT terminals and landing rights are on the basis of first-come-first-serve or any other licensing mode specified by ATRA upon compliance with technical standards.

8. PROCESSING TIME

ATRA shall process all licenses applications within three (3) months or notify the applicant in the same time frame of unsuccessful application. This processing time is not applicable in case a competitive assignment mechanism is used by ATRA to award the license(s).

9. LICENSE SELECTION CRITERIA

(a) The following technical and operational issues shall be taken into consideration in the license approval process:

(i) Lifetime of satellite/orbit/inclination.

(ii) Multiple Access Method.

(iii) Transponder redundancy, Space Segment redundancy, RF redundancy.

(iv) Type of modulation.

(v) Link budget and fade margin.
(vi) C/I ratio.
(vii) Transponder traffic loading.
(viii) Saturation flux density at satellite input.
(ix) Number of Earth Stations, linkages, number of gateways.
(x) Received power level contour.
(xi) Location of Network Control Center, Network Operating Center.

(b) In addition to the foregoing, applicants will be required to show evidence of the following service capabilities:
(i) Service Scalability: There must be service flexibility such that single subscribers can sign-on whatever data rate they desire. Whole Transponders or fractional Transponder capability may also be required.
(ii) Multiple Service Mode: Shared bandwidth, guaranteed bandwidth and dedicated bandwidth.
(iii) Sign-on time variable of between few hours to months or years.
(iv) 24-Hr on-line Technical Support.
(v) Commercial conditions imposed on users such as payment terms, liability, quality of service guarantee, etc.
(vi) Local representation in Afghanistan.
(vii) Evidence of ITU coordination filings and license from the operator’s host country regulator, for space segment providers.

10. CONDITIONS FOR LICENSED NETWORK

Public network operators shall be licensed so as to guarantee quality assurance for the service being provided. The following conditions apply to the Licensee of a Public Telecommunications Commercial Satellite Network:

(a) The Licensee may install, operate and manage a Public Telecommunications Network comprising one or more satellites and associated terrestrial facilities in Afghanistan, to communicate with the satellites.
(b) The Licensee may install, operate or manage an International Gateway in Afghanistan, but only for the purposes of the Licensed Services.
(c) The Licensee shall notify ATRA of any significant changes to the Licensed Network or to any stored commands or protocols contained in it and shall provide ATRA with information about the changes and their effect in Afghanistan.
(d) The Licensed Network, including all Telecommunications equipment, shall conform to the technical specifications for networks and equipment including for the use of frequency spectrum, as may be set out in the Regulatory Framework.
(e) The Licensee shall obtain all necessary licenses and permits as may be required to build, modify and remove any construction in accordance with the relevant laws in Afghanistan.

11. CONDITIONS FOR LICENSED SERVICES

The following conditions apply to the Licensee regarding the provision of services via the Public Telecommunications Commercial Satellite Network:
(a) Only persons that have been licensed or granted a permit or authorization to provide telecommunication services may provide such services via satellite. 
(b) The Licensee shall be a local juridical entity established and in good standing under the Corporations and Limited Liability Companies Law (CLLCL) and all other laws of Afghanistan and their amendments. 
(c) The Licensee is authorized to provide public telecommunications services in Afghanistan, but only by means of the Licensed Network. 
(d) The Licensee shall comply with the Media Regulatory Framework insofar as applicable to the public telecommunications service(s) offered to the public. 
(e) The Licensee shall make publicly available the tariffs for its Licensed Services and terms and conditions on which Licensed Services are provided. 
(f) The Licensee shall pay all applicable fees, including License, administrative, spectrum and other fees in a timely manner. 
(g) The Licensee shall fulfill its Universal Service obligations as specified in the Regulatory Framework. 
(h) The Licensee shall commission the Licensed Network and provide the Licensed Services on a commercial basis within a time specified by ATRA from the date of commencement of the License. 
(i) Any Change in Control of the Licensee shall require the prior written consent of ATRA. 
(j) The ownership of the License may not be transferred without the prior written consent of ATRA and until and unless all outstanding fees have been paid to ATRA. 

12. GUARANTEES 
Upon the grant of a license under these Regulations, the following guarantees shall come into effect in a Licensee: 
(a) Afghanistan Telecommunications Regulatory Authority (ATRA) will take any necessary measures to protect Satellite Service Providers and prompt action in the event of interference to its services by Earth Station(s) located in the territory of Afghanistan. The Licensee shall however be obligated to provide details of the source of interference and the geographical location of the interfering party. 
(b) The operator will be certified and accredited for the processing of funds transfer through the Central Bank of Afghanistan or any other authorized bank in Afghanistan for the purpose of paying for the satellite services. 
(c) ATRA will give full support to the Licensee in case of any request for coordination. 
(d) ATRA shall also render any other support within the scope of ATRA’s powers and statutory duties. 
(e) All successful applicants will be issued license documents stipulating full details of rights, privileges and obligations. License formats are found in Annex 4 - Commercial Satellite Services License Templates. 

13. LICENSEE’S OBLIGATIONS
In addition to any other obligation provided by the Telecom Law or other legislation, a Licensee under these guidelines shall be bound by the following obligations:

(a) A Licensee shall provide accurate information relating to network systems, operations and subscribers, such as location, transmit power, etc. as may be required by ATRA.
(b) A Licensee shall ensure that no user or operator is provided a service or connected to its network without license from ATRA.
(c) In view of the fact that satellite networks support vital telecom infrastructure with bearing on safety of life and national security, a Licensee shall not disconnect or cause cessation of service to a Afghan user without a written permission from ATRA, even if such cessation is as a result of debt owed. If no such express permission is received from ATRA within fourteen (14) working days, after recorded delivery to ATRA, the Licensee shall deem the request as thereby granted and shall then be at liberty to effect the disconnection.
(d) Network Security: A Licensee shall ensure that the subscriber’s security is guaranteed and accordingly, the Licensee shall not at any time grant a direct access to subscriber data to a third party.

14. LICENSEE’S RESPONSIBILITIES

Licensees are generally responsible to ensure that:

(a) Equipment is deployed, operated and maintained to meet the regulations and the terms of the license and to prevent undue interference.
(b) Relevant operational staff of the Licensee are trained and certified by the Licensee to be competent to undertake their roles.
(c) Records of the operational characteristics of all satellite Earth Stations and Commercial Satellite Service users are maintained, which shall be made available to ATRA for inspection on request.
(d) The license is current and renewed in a timely manner.
(e) Transmissions at any terminal are disabled if requested by ATRA.
(f) Lawful interception of satellite communications is granted if requested by the competent authority.
(g) The clearance to operate at a location should be acquired from the concerned authorities before deployment of the station.

15. ACCESS TO RESOURCES AND ESSENTIAL FACILITIES

The Licensee will have access to all resources and essential facilities in accordance with the Regulatory Framework, including but not limited to:

(a) Spectrum and number authorizations,
(b) Interconnection,
(c) International gateways,
(d) Rights-of-way and easements,
(e) Optical fiber networks,
(f) Colocation.
16. LICENSE DURATION
The duration of a license issued by virtue of these Regulations shall be 5 (five) years, or the remaining life span of satellite, whichever is less.

17. LICENSE RENEWAL
All licenses shall be subject to renewal after expiration and all applicable fees are payable upon renewal. ATRA reserves the right to review its license fees from time to time.

18. APPLICATION
An application for Commercial Satellite Services license and/or registration must be made to ATRA using the prescribed Application forms which are found in Annex 5 - Application Forms of these Regulations. License application Forms shall be available from ATRAs offices nationwide or at ATRA’s website (www.atra.gov.af).

19. COMMERCIAL SATELLITE SERVICES AND LANDING RIGHTS REGIME
The Commercial Satellite Services and Landing Rights Regime consists of:

(a) Commercial Satellite Services Regulations comprising:
    (i) Commercial Satellite Services Application System and procedures
    (ii) List of Satellite International Regulations recognized by ATRA (see Annex 6 - Specific International Regulations for Satellite Communications)
    (iii) Appendix 7 of the ITU R Radio Regulations
    (iv) National Frequency Allocation Table (NFAT)
(b) Type Approval register
(c) Service Provider License database
(d) Authorized Space Stations list
(e) List of Satellite Earth Stations registered by ATRA
(f) Sales and Installation register
(g) Spectrum Usage database
(h) Call Sign database

SPECIFIC PROVISIONS

20. SATELLITE FILING
(a) A satellite network filing may only be submitted to ITU by an Administration of an ITU member State.
(b) All filings for Earth Stations or space stations shall be done electronically and in accordance with the format specified by ITU through the Ministry of Communications and Information Technology.
(c) The process and procedures for Satellite fillings are to be specified by ATRA and will be published and may be amended from time to time.

21. INTERNATIONAL COORDINATION

(a) The Coordination procedures stated in Appendix 7 of the ITU R Radio Regulations shall be applicable to these Regulations.

(b) In addition, an applicant requesting for Earth Station license in Afghanistan shall be required to submit detailed coordination contours and interference analysis where operating band is allocated on co-primary or secondary basis. However there shall be no coordination requirement in primary allocations that are exclusive.

(c) Operators are expected to adhere strictly to the following ITU-R series recommendation and guidelines on sharing between fixed services and fixed satellite services:

SF. 356-4, SF.357-4, SF.358-5, SF.406-8, SF.1004/5/6/8, SF.1193, SF.1320 and other applicable 600/700 series recommendation or amendments thereof.

(d) Space Segment Providers must engineer their system in such a way that the following capability and flexibility are in-built into their system:

(i) Ability to vary power received in response to request.

(ii) Lease period (minimum six (6) months).

(iii) Monthly payment of service fee.

(iv) Change of center frequency.

(e) Where the Space Segment Provider is forced to pre-empt or interrupt service in a Transponder in order to protect the satellite in case of emergency, the Provider must within such a period as may be agreed with the client make alternate provision for continuation of service via a spare transponder or another satellite in its constellation and give reasonable notice before interrupting the service.

(f) Space Segment Providers shall submit terms and conditions of service to ATRA for approval and any changes thereof must be approved by ATRA before coming into force. Such approvals shall be granted within ninety (90) days of application failing which they shall be deemed approved. Operational requirements shall also be subjected to approval by ATRA.

22. AUTHORIZATION FOR LANDING RIGHTS

A satellite operator authorized by another Administration can request, on its own initiative, the authorization of ATRA to provide services in Afghanistan. Once the approval of ATRA is obtained, a non-Afghan Space Station is eligible to serve Afghanistan and the name of that satellite shall be included in the list of “Authorized Space Stations”.

An applicant for an Authorization for Landing Rights shall:

(a) Formally register its legal representative in Afghanistan with ATRA, with a commitment to keep this data up to date, and to provide the Space Segment solely through the aforementioned representative.
(b) Obtain ATRA’s recognition to the effect that prior technical coordination of orbiting parameters and the associated frequency bands with the Administration of Afghanistan has been carried out, in accordance with ITU Radio Regulation procedures.
(c) Submit simplified technical information on the satellite system, indicating its possible uses, orbiting parameters, frequency bands and geographical areas to be covered, (footprints) and any other relevant data.
(d) Submit any other documents issued by a competent authority showing the terms authorized in the country of origin for use of the space segment.
(e) Comply with legal and regulatory conditions and standards governing satellite use, especially the provisions contained in the Telecom Law.
(f) Pay for license for the foreign satellite landing rights and for use of the associated radio frequencies, an amount determined by ATRA.
(g) Submit formal undertaking to the effect that it shall submit quarterly to ATRA, information on the following:
   (i) All new activations and updates (in the event that there are changes) of access to the space segment granted.
   (ii) Submit the degree of compliance with the parameters of quality of service applicable to the provision of space segment.

23. SPACE SEGMENT PROVIDERS
A Space Segment Provider Licensee shall always comply with the following conditions:
   (a) All satellite Space Segment Providers must obtain landing rights from ATRA before being allowed to provide services to users within the Afghan geographical territory, including air space.
   (b) All satellite Space Segment Providers may permit only end-users who are licensed by ATRA to have access into their network either directly or indirectly through country representatives. Where an intermediate bulk agent or reseller in the supply chain leases a transponder or bandwidth from the Space Segment Provider, for distribution to smaller users, the provider must ensure that all end-users accessing their network are licensed by ATRA before allowing access.
   (c) Space Segment Providers must ensure that power flux densities of their transmitted signals are within the limits specified by ITU when the band in question is shared with terrestrial services.
   (d) Where the Licensee operates several satellites, a separate license is required for the constellation satellites in each separate band, since License conditions may vary from band to band.

24. GROUND SEGMENT
In addition to licensing of the Space Segment, authorization requirements for Commercial Satellite Service Providers and individual licensing for Earth Station facilities is mandatory before any Satellite Ground Equipment is allowed.
25. BANDWIDTH RESELLERS

A License is required in order to be able to resell satellite bandwidth capacity, either to end-users or to other service providers. The Licensee shall comply with the following obligations:

(a) The Licensee shall provide ATRA an updated configuration diagram of all telecommunications equipment used to provide bandwidth capacity to the users.
(b) The Licensee shall furnish ATRA on a quarterly basis a list of all customers being served, including the capacity leased and their location.
(c) Any additional resources such as spectrum or access to wired infrastructure required to provide the service shall be duly licensed before the Licensee can start offering the commercial services.
(d) The Licensee shall not discriminate between customers regarding the type of services or quality offered to them.
(e) Particular conditions shall apply if the service is provided using satellite networks such as VSAT and like.

26. FIXED EARTH STATION

Fixed Earth Stations are sited at fixed locations and may be used to provide fixed services or as feeder links to satellites, which provide Broadcast Satellite Services, mobile satellite services or aeronautical mobile services accordingly. VSAT hub stations are also covered under the fixed Earth Station license. The following conditions apply to Fixed Earth Station licenses:

(a) Eligible persons who may apply for a permanent Earth Station license are:
   (i) Fixed and Broadcast Satellite Service Providers that are licensed in Afghanistan.
   (ii) Government ministries and government agencies for fulfilling their own communication needs.
   (iii) Public commercial service providers.
(b) The following technical conditions are to be followed for operating the satellite Earth Stations in Afghanistan:
   (i) The antenna radiation pattern is required to meet the minimum performance specified by ITU Recommendation ITU-R S.580.
   (ii) Earth stations can only transmit to and receive from the satellite which is specified in the license.
   (iii) All transmissions are required to comply with the technical parameters mentioned in Annex 6 - Specific International Regulations for Satellite Communications.
   (iv) ATRA may require the Licensee to provide additional screening at the installation.
   (v) Site shielding may also be required which can be a natural or manufactured obstruction positioned between the Earth Station and potentially interfering stations and/or stations potentially being interfered with.
(c) It is also required that relevant satellite data shall have been submitted to the ITU in accordance with established ITU procedures before deployment of the earth station.

27. CONDITIONS FOR VSAT NETWORK SERVICES PROVISION

Satellite Earth Stations operating as a part of a VSAT network (VSAT) or as a part of any such network of terminals where all traffic is routed via satellite are required to be issued a satellite Earth Station network link license. The following conditions apply:

(a) The communication may be to and from a central control hub Earth Station in a star configuration, or as mesh network, which in its simplest form may be a point-to-point VSAT link.
(b) The appropriate topology will be selected, by the Licensee, depending on the applications and traffic flow requirements.
(c) Every VSAT or mobile terminal shall be licensed individually, in addition to the network operator’s license.
(d) IDA operating licensing meant for closed user groups are not allowed to carry third party traffic.
(e) IDA operators are not permitted to provide services outside the borders of Afghanistan.
(f) After the issuance of VSAT Service Licenses, this licensing option is available only for fulfilling the internal communication needs for:
   (i) foreign missions & Embassies in Afghanistan (on reciprocal grounds), and
   (ii) government organizations & security agencies through agreement with the Afghan government.
(g) Users of the VSAT network are not allowed to provide commercial services to third-parties through it.
(h) The following technical conditions apply:
   (i) Earth station antennas are required to be employed for transmission at elevation angles of not less than 10 degrees measured from the horizontal plane to the direction of maximum radiation as per ITU-R radio regulation as per ITU-R RR 21.14.
   (ii) The level of off-axis Equivalent Isotropically Radiated Power (e.i.r.p.) emitted by any Earth Station must not exceed those limits specified in ITU-R Radio Regulations RR 22.26-22.39 in bands where these limits are applied.
   (iii) The Antenna Radiation Pattern Envelope must meet the minimum performance specified by ITU Recommendation S.580.

28. TRANSPORTABLE EARTH STATIONS

Transportable Earth Station (TES) operations are used to provide outside broadcast links either back to a studio or directly to a Broadcast Satellite. The following conditions apply to a Transportable Earth Station (TES) License:

(a) The deployment of any number of TES terminals in the assigned exclusive channel(s) at any location is authorized, except for the restricted locations mentioned in the technical schedule of the license.
(b) Planned locations and technical parameters for each station are to be submitted to ATRA fifteen (15) working days prior to their deployment as per the format provided in the technical schedule of the license.

(c) The applicants that need to use TES terminals during an event can apply for the temporary license.

(d) Eligible persons who may apply for Transportable Earth Station License are:
   (i) Organizations registered in the Islamic Republic of Afghanistan for providing Broadcast Services.
   (ii) Organizations which are authorized to provide Broadcast Services in Afghanistan via an authorization issued by the Ministry of Information and Culture.

(e) Licensees are required to meet the following conditions while deploying/operating the transportable earth stations:
   (i) Earth station antennas are required to be employed for transmission at elevation angles of not less than 10 degrees measured from the horizontal plane to the direction of maximum radiation as per ITU-R radio regulation RR21.14.
   (ii) The component of Effective Isotropic Radiated Power directed towards the horizon and the minimum elevation angle above the horizontal must comply with ITU-R Radio Regulations and not exceed those limits specified by ITU-R RR Nos. 21.8 – 21.15.
   (iii) The level of off-axis Equivalent Isotropic Radiated Power (e.i.r.p.) emitted by any Earth Station must not exceed those limits specified in ITU-R RR 22.26-22.39 in bands where these limits are applied.
   (iv) In the band 13.78-14 GHz, an Earth Station of a geostationary fixed-satellite service network must have a minimum antenna diameter of 1.2 m. Earth stations with an antenna diameter of less than 4.5 m will be operated on a non-interference basis with respect to maritime radiolocation stations in accordance with ITU-R radio regulation RR 5.502.
   (v) The operator is required to acquire all necessary permissions at each notified location where the transportable Earth Station will be deployed prior to commencing operation.
   (vi) All transmissions in the fixed satellite service must be terminated prior to any change of location.
   (vii) The equipment is required to be attended at all times during TES operation, and an emergency contact be identified for the designated site.

29. GLOBAL MOBILE PERSONAL COMMUNICATIONS SYSTEMS

The following requirements apply to Global Mobile Personal Communications Systems (GMPCS) Licensees:

   (a) The Licensee might construct, operate, implement and maintain a GMPCS Land Earth Station for the purposes of establishing, maintaining, validating and
controlling command functions and communication with the space segment of a GMPCS System.

(b) The Licensee shall provide activation, billing, maintenance and related management services for subscribers to GMPCS services.

(c) The Licensee shall apply to ATRA for spectrum and number authorizations in accordance with the Regulatory Framework and shall comply with the terms of any authorizations issued.

(d) The Licensee shall have the right to interconnect its Network with the Network of the Carrier or any other Licensee.

(e) The Licensee shall not reduce or cease to provide the service unless with the express written approval of ATRA.

(f) The Licensee shall provide at its own cost and by means of its lines, such infrastructural facilities as would enable a caller free of charge, in the event of an emergency in the area serviced by the Licensee, to:

(i) Access operator assistance services; and

(ii) Access emergency services and communicate with an emergency organization.

The Licensee shall ensure that such emergency calls have priority access over all other routine calls in the Network.

(g) The Licensee shall take all reasonably practicable steps to maintain, to the greatest extent possible:

(i) The availability of its services, having particular regard to the needs of Emergency Organizations, in the event of catastrophic network failure or in cases of Force Majeure such as flood, lightning, fire, etc.;

(ii) The integrity of the Licensee’s Network, having particular regard to the needs of Emergency Organizations.

30. DIRECT BROADCAST SATELLITE TELEVISION

DBSTV services includes downlinking satellite television channels for public viewing in Afghanistan, regardless of whether they are directly received by the users or retransmitted to them using additional transmission equipment. Licensees of DBSTV services, including DTH, shall abide to the following:

(a) All persons/entities providing Direct-Broadcast Satellite Television Satellite services with channels uplinked from other countries for public viewership in Afghanistan shall be required to obtain a License from ATRA.

(b) DTH Licensee shall operate in accordance with these regulations, as well as the DTH procedures approved and maintained by ATRA.

(c) A Licensee must be a company registered in Afghanistan, irrespective of its equity structure, foreign ownership or management control.

(d) The Licensee must have a commercial presence in Afghanistan with its principal place of business in Afghanistan.

(e) The Licensee must either own the channel it wants downlinked for public viewing, or must enjoy, for the territory of Afghanistan, marketing/distribution rights for the same, inclusive of the rights to the advertising and subscription revenues for the channel.
(f) The Licensee shall furnish, technical details such as nomenclature, make, model, name and address of the manufacturers of the equipment/instruments to be used for downlinking and distribution, the block schematic diagram of the downlinking and distribution system and also demonstrate the facilities for monitoring and storing record for ninety (90) days.

(g) The Licensee shall adhere to any other code/standards guidelines/restrictions prescribed by Ministry of Information and Culture, Government of Afghanistan for regulation of content on TV channels from time to time.

(h) The Licensee shall obtain prior approval of ATRA before undertaking any significant upgrade, expansion or any other changes in the downlinking and distribution system/network configuration.

(i) The Licensee shall provide Satellite TV Channel signal reception decoders only to licensed Cable Service providers registered by ATRA.

31. SALES AND INSTALLATION OF TERMINAL EQUIPMENT

A License is required to provide Sales and Installation service of Satellite Terminal Equipment in Afghanistan. Licensees are only required to register at ATRA in order to obtain the License, but the following conditions apply:

(a) The Licensee shall be a company registered in Afghanistan, irrespective of its equity structure, foreign ownership or management control.

(b) The Licensee shall provide on a quarterly basis a list of customers who have been provided with services, including:
   (i) Name and address of customer;
   (ii) Type of equipment installed;
   (iii) Band and frequencies utilized;
   (iv) Date of sale/installation.

(c) All equipment that is sold/installed within the geographic limits of Afghanistan shall fully comply with the Type Approval regulations.

(d) The Licensee shall follow all dispositions regarding security/safety of satellite equipment installation.

COMPLIANCE

32. COMPLIANCE WITH NFAT

Frequency allocations for space radiocommunication services in the Islamic Republic of Afghanistan are in accordance with the ITU Allocations for Region 3. For that reason the following apply:

(a) All satellite equipment intended for use within the territory of Afghanistan shall comply with the prescriptions of the National Frequency Allocation Table (NFAT) of Afghanistan.

(b) Non-compliance with the allocations indicated in the NFAT will result in an automatic rejection of the Commercial Satellite license request.
(c) Should incompatibilities of the satellite equipment with the NFAT be resolved, the Applicant will be entitled to resubmit the application in accordance to the applicable procedure.

The Licensee shall apply to ATRA for assignment of frequencies in accordance with the Regulatory Framework and shall comply with the terms of any spectrum permits issued.

33. TYPE APPROVAL

(a) All satellite ground stations equipment and End-User terminals must be type-approved by ATRA before being imported or put into service in Afghanistan. Manufacturers will be allowed, for each model, to obtain general certification for their equipment after which users will not be required to type-approve other units purchased.

(b) Type Approval may however be waived where applicant or Licensee satisfies ATRA that ITU certification has been given under GMPCS Memorandum of Understanding with respect to the equipment in issue.

(c) Self-declaration of conformity by manufacturers shall not be tenable as alternative to the requirement of type approval under this regulation.

34. INTERCONNECTION AND ACCESS

Interconnection of the Licensed Network to networks of other Licensed Operators and resolution of interconnection disputes shall be governed by the Telecom Law and the Regulatory Framework subject to the following:

(a) Space Segment Service Providers shall ensure that their customers comply with all conditions guiding the use of satellite services in Afghanistan and all conditions stipulated in respect of connections to public switched telephone service or the national network.

(b) Resellers and service providers shall not transmit any international traffic across the Afghanistan borders without a written permission from ATRA.

35. COMPLIANCE WITH TECHNICAL STANDARDS

The following applicable technical standards shall be imposed by ATRA on Commercial Satellite equipment:

(a) Digital VSAT networks operating in the 12/14 GHz band shall have a maximum outbound downlink EIRP density of +10 dBw/4 kHz per carrier and Earth Station antennas with maximum input power density of −14 dBw/4 kHz.

(b) Analog VSAT networks operating in the 12/14 GHz or 4/6 GHz bands shall have a maximum outbound downlink power density of +17 dBw/4 kHz per carrier and maximum antenna input power densities of - 8.0 dBw/4 kHz.

(c) All Earth Stations with EIRP above 1 kw (1000 watts) must obtain equipment type approval and site approval from ATRA before importation and installation of equipment. These approvals must be obtained for each site irrespective of whether such equipment has been given a general type approval earlier or not.
36. INTERFERENCE MITIGATING TECHNIQUES

ATRA shall encourage the use of the following technical means to ensure interference-free operation in band shared by both satellite and terrestrial systems:

(a) Limitation on satellite power flux density (PFD) produced at the surface of the earth.
(b) Limitation on the Effective Instantaneous power radiated by terrestrial stations.
(c) Maintenance of high antenna performance standards.
(d) Controlling the elevation angles of satellite Earth Station antennas in order to limit power radiated to the horizon.
(e) Ensuring minimum separation between terrestrial stations and satellite Earth Stations.

37. APPLICABLE STANDARDS

For avoidance of doubt, ATRA shall always adopt radiation limits specified by ITU-R in Article 21 of the Radio Regulations and shall mandate Licensees to adhere accordingly.

38. HEALTH AND SAFETY

(a) All satellite dishes except for receive-only must be located at least the distances stated below, from residential areas or any buildings, depending on the EIRP, as follows:

<table>
<thead>
<tr>
<th>Vertical/Horizontal</th>
<th>Distance</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 w</td>
<td>5 m</td>
</tr>
<tr>
<td>50 w</td>
<td>10 m</td>
</tr>
<tr>
<td>100 w</td>
<td>15 m</td>
</tr>
<tr>
<td>1 kw</td>
<td>50 m</td>
</tr>
<tr>
<td>5 kw</td>
<td>100 m</td>
</tr>
</tbody>
</table>

(b) Transmitters shall not be located in hospital premises or airports, except with prior approval of ATRA upon an expert’s advice.
(c) No Earth Station shall be located within 1 000 m of the geographical boundary of an airport and all towers shall be fenced to prevent disruption of aeronautical operations.
(d) For disaster relief for satellite operations, the provisions of the United Nations Tampere Convention shall apply.
(e) All Space Segment Providers, whether private or treaty-based, recognized by ITU, or that have satisfied ITU filing conditions will be eligible for landing rights licenses in Afghanistan. They will also be allowed to directly sign on users, subject to ATRA certification.
(f) Custom duties on satellite equipment will be the same as applicable to telecommunication equipment.

39. AIRCRAFT PROTECTION
It is internationally recognized that there is a need to protect aircraft avionics from the possibility of interference arising from Earth Stations operating in close proximity to airports. Consequently, the deployment and operation of satellite Earth Stations in areas around and within the perimeter fences of civil and military airports is not allowed.

40. PUBLIC EMERGENCY, PUBLIC INTEREST, SAFETY AND NATIONAL SECURITY

(a) The Licensee shall comply with any directions as ATRA or other competent authorities may issue in case of:
   (i) Public emergency on matters relating to work or ownership of the Licensee.
   (ii) Public interest, safety and/or national security.
(b) The Licensee shall maintain calling party/called party details and subscriber information in accordance with any measures issued by any competent authority responsible for public interest, safety and national security.
(c) The Licensee shall install any equipment required to allow access to its Licensed Network and/or the retrieval and storage of data for reasons of public interest, safety and national security.
(d) Public Protection and Disaster Relief (PPDR) satellite equipment is exempt from the application of these regulations in case of national/international emergency situations and disasters.

41. INSPECTION AND MONITORING

The Licensee shall permit ATRA or its authorized agent to have access to any premises of the Licensee and to inspect any Telecommunications equipment or documents including accounts or other records at any time to ensure compliance with the provisions of the License and the Regulatory Framework.

42. STANDARD OF CONDUCT

The Licensee shall not use or knowingly permit the use of the Licensed Network or the Licensed Services for any purpose that violates the Telecom Law and its amendments or any other applicable laws or the Regulatory Framework. The Licensee shall endeavor to take all reasonable action to ensure that the Licensed Network and the Licensed Services are not used for any such purposes.

CONSUMER ISSUES

43. OPERATIONAL SUPPORT

(a) All Space Segment Providers shall maintain 24 hours operational support to clients in Afghanistan to attend to technical and operational issues. In this regard, all calls made for maintenance support shall be at the expense of the Space Segment Provider.
(b) All Licensee shall keep records of calls made for maintenance and complaints in accordance to ATRA’s procedures.

44. END-USER TERMINAL LICENSE
(a) No operating license shall be required for the use of portable terminal equipment by end-users.
(b) Corporate users with multiple VSAT terminals connected to a hub shall not be required to obtain license for each earth station installed. However, all remote sites must be registered with ATRA.
(c) Receive-only earth stations are not subject to licensing but must be registered with ATRA.
(d) Space Segment Providers are not obligated to maintain an office in Afghanistan. However, they shall have an authorized representative in Afghanistan who shall also act as contact person for information exchange regarding regulatory matters.

45. SERVICE OUTAGE
(a) The Licensee shall not intentionally interrupt the operation of the Licensed Network or provision of the Licensed Services without first notifying ATRA in writing and giving reasonable notice to Customers. The notice shall indicate the time during which the interruption will take place.
(b) Any service outage lasting for more than 6 (six) hours shall entitle the customer to an outage credit equivalent to the prorated service fee due for that portion of time during which the outage lasted.
(c) The Licensee shall not cease to provide Licensed Services without the express written approval of ATRA.

46. SUSPENSION OF SERVICES TO A CUSTOMER & QUALITY OF SERVICE
(a) Any interruption of services to a particular End-User or Customer by a Licensee due to a fault from the transmitting earth station and/or in breach of the terms of the contract shall be subject to prior notification and approval by ATRA. The Licensee shall also show proof that the Customer has been served necessary advance notice and at least a reminder.
(b) ATRA reserves the right to order the suspension of services to a particular End-User or Customer as a result of non-compliance with ATRA’s guidelines.
(c) Licensees shall always maintain a quality of service not less than 99.5 percentile.

FEES AND CHARGES

47. COMMERCIAL SATELLITE LICENSE FEES
ATRA shall administer the following fees with respect to satellite licenses:
(a) A one-off administrative fee (for application) in respect of costs related to the issuing, monitoring and enforcement of a license shall be paid. This shall be determined by ATRA via the relevant procedure.

(b) Spectrum usage fee, which shall be based on the economic value of the spectrum. Applicable regulations shall guide ATRA in imposing spectrum fees in accordance to the spectrum pricing mechanisms.

(c) Licensees will, in addition, and upon final approval, pay annual regulatory fees as set out via the relevant procedures.

(d) VSAT license fees will depend on number of remote sites for closed user groups and are renewable annually as set out via the relevant procedures.

(e) Portable GMPCS Earth Stations and receive-only stations are license exempt.

(f) Any license fees not paid as and when due shall attract a delinquency charge at a monthly percentage rate until the license fee is settled as established in the relevant procedure.

(g) The Satellite license fees will be adjusted by ATRA a maximum of the Consumer Price index (CPI) as published by the Central Statistics Organization of Afghanistan. The Adjusted Commercial Satellite License fees will be published annually in ATRA’s website.

**AMENDMENT AND REVOCATION**

**48. AMENDMENT OF LICENSE**

(a) Every request for an amendment to the License by a Licensee shall be made by an application in writing and state the following:

(i) The particular conditions which are requested to be amended;

(ii) Reasons for the request.

(b) ATRA shall consider the request and may seek further information if necessary before deciding:

(i) to amend the License;

(ii) not to amend the License;

(iii) to amend the License but with modifications.

(c) Every amendment initiated by ATRA shall be by way of the following process:

(i) Draft notice of proposed amendment (which may include a variation, revocation or addition to the conditions of the License) and reason for amendment to be given by ATRA to the Licensee;

(ii) The Licensee shall be given a reasonable time to respond.

(d) ATRA shall consider the response of the Licensee before deciding whether:

(i) to amend the License;

(ii) not to amend the License;

(iii) to amend the License but with modifications.

**49. REVOCATION OF LICENSE**

(a) A Commercial Satellite Services License and/or registration may be revoked in the event that:
(i) Licensee fails to provide the services via a duly registered/licensed satellite system in Afghanistan.
(ii) Connection with unlicensed networks and/or operators is materialized with the primary purpose of diverting traffic to/from Afghanistan.
(iii) Information filed to obtain the License proves to be false and/or maliciously tampered.
(iv) Licensee fails to comply with the Regulatory Framework for Satellite Broadcast.
(v) Continuous intentional interference to other telecommunication services.
(vi) Installation and commercialization of equipment that does not conform to Type-Approval Regulations.
(vii) Unauthorized transfer of the License.
(b) ATRA will notify the Licensee in writing of the revocation of its License and/or registration and the reasons thereof.

**BREACH AND PENALTIES**

**50. OFFENCES**
The Licensee or any person providing public satellite telecommunication services without the respective license/permit, shall be subject to penalties as provided in the Telecom Law, its amendments and the Regulatory Framework, if it fails to comply with any of the following:

(a) Any obligation under the Telecom Law and its amendments;
(b) Any obligations within the provisions of the License; or
(c) Obligations contained in the Regulatory Framework.

**51. SUSPENSION**
Subject to the provisions contained in Regulation 49 of these guidelines, in the event of a Commercial Satellite Services Licensee violating any of the terms and conditions of the License, or any other provisions of the Regulations, ATRA shall have the right to impose the following penalties:

(a) In the event of first violation, suspension of the License and/or registration and prohibition to provide services up to a period of thirty (30) days.
(b) In the event of second violation, suspension of the License and/or registration and prohibition to provide services up to a period of ninety (90) days.
(c) In the event of third violation, revocation of the License and/or registration and prohibition to provide services up to the remaining period of permission.
(d) In the event of failure of the Licensee to comply with the penalties imposed within the prescribed time, revocation of License and/or registration and prohibition to provide services up to the remaining period of permission and disqualification to hold any Licenses and/or registration in the future for a period of five (5) years.
(e) In the event of suspension of License and/or registration, the Licensee will continue to discharge its obligations under the License Agreement including the payment of fees.

(f) In the event of revocation of License and/or registration, the fees paid will be forfeited and shall not be refunded.

(g) All the penalties mentioned above shall be imposed only after giving a written notice to the Licensee.

52. PENALTIES

The following penalties will be applied, in conjunction with other measures, if ATRA determines that the Law and/or the Regulatory Regime breach have been breached in the following situations:

(a) Any person that offers Commercial Satellite Services without the respective License and/or registration is guilty of an offence and is subject to a fine not exceeding ten million Afghanis (Afs. 10,000,000.00).

(b) Any person who willfully and knowingly uses the Space Segment of a Space Station not registered in the Islamic Republic of Afghanistan is subject to a fine not exceeding one million Afghanis (Afs. 1,000,000.00).

(c) Any person managing a transmitting Satellite Earth Station who causes harmful interference to aircraft avionics or other stations is subject to a fine not exceeding five million Afghanis (Afs. 5,000,000.00).

(d) Any Licensee that impedes or obstructs ATRA or its authorized agent the access to any premises for inspection to ensure compliance with the provisions of the License and the Regulatory Framework shall be subject to a fine not exceeding two million Afghanis (Afs. 2,000,000.00).

(e) Any Licensee who intentionally interrupts the operation of the Licensed Network or provision of the Licensed Services to its Customers without first notifying ATRA is subject to a fine not exceeding one million Afghanis (Afs. 1,000,000.00).

(f) The upper limits set in this regulation for the penalties might be increased for repetitive breaches, up to the limits set by the Telecom Law.

53. PUBLICITY

ATRA will maintain on its website:

(a) Commercial Satellite Services Application System.
(b) List of Satellite International Regulations recognized by ATRA.
(c) Afghanistan National Frequency Allocation Table (NFAT)
(d) Type Approval register.
(e) Service Provider License database.
(f) Authorized Space Stations list.
(g) List of Satellite Earth Stations registered by ATRA.
(h) Sales and Installation Provider register.
(i) Call Sign database.
These lists will be updated at least on a monthly basis.

PROCEDURES

54. PROCEDURES
ATRA shall develop and implement the procedures required to effectively establish the Commercial Satellite and Landing Rights Licensing Regulations as deemed necessary.
Section 2

Annex 1 – Categories of Commercial Satellite Services

Figure 1 - Types of Authorizations Required for each Category of Commercial Satellite Services
Annex 2 – Licensing Application Process

START

Applicant identifies Requirements applicable to License Category

Applicant completes Application and submits documents

ATRA reviews Application and documents

Documents complete?

Documents returned to Applicant

International coordination required?

YES

International coordination

NO

Landing Rights required?

YES

Follow Landing Rights procedure

NO

Application returned for modification

Requested frequencies NFAT compliant?

YES

Update Spectrum Usage database

NO

Application cancelled

Fees paid timely?

YES

Submit License(s) to Licensee

NO

Calculate applicable fees including ancillary services

Figure 2 - Schematic Flowchart
Annex 3 – List of Sub-Bands of FSS and BSS Spectrum

<table>
<thead>
<tr>
<th>Bands</th>
<th>Space-to-Earth</th>
<th>Earth-to-Space</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>3 700-4 200 MHz</td>
<td>5 925-6 425 MHz</td>
</tr>
<tr>
<td>Extended Ka</td>
<td>17.7-18.3 GHz</td>
<td>27.5-28.35 GHz</td>
</tr>
<tr>
<td>Ka</td>
<td>18.3-18.8 GHz</td>
<td>28.35-28.6 GHz /29.25-29.5 GHz</td>
</tr>
<tr>
<td>Ku</td>
<td>19.7-20.2 GHz</td>
<td>29.5-30.0 GHz</td>
</tr>
<tr>
<td>Extended Ku</td>
<td>11.7-12.2 GHz</td>
<td>14.0-14.5 GHz</td>
</tr>
<tr>
<td>Other Ka</td>
<td>10.95-11.2 GHz</td>
<td>13.75-14.0 GHz</td>
</tr>
<tr>
<td>X</td>
<td>17.3-17.7 GHz</td>
<td>17.8-19.3 GHz</td>
</tr>
<tr>
<td>BSS</td>
<td>11.45-11.7 GHz</td>
<td>28.6-29.1 GHz</td>
</tr>
<tr>
<td>Ku</td>
<td>7 250-7 750 MHz</td>
<td>7 900-8 400 MHz</td>
</tr>
<tr>
<td>Ka</td>
<td>17.3-17.8 GHz</td>
<td>24.75-25.25 GHz</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Band</th>
<th>Satellite Communications Frequency Band in National Frequency Allocation Table</th>
<th>Satellite Communication Service in Frequency Allocation Table</th>
</tr>
</thead>
<tbody>
<tr>
<td>Downlink Frequency</td>
<td>Uplink Frequency</td>
<td></td>
</tr>
<tr>
<td>VHF</td>
<td>137.0-138.0 MHz</td>
<td>148.0-150.05 MHz</td>
</tr>
<tr>
<td>VHF/UHF</td>
<td>144-146 MHz</td>
<td>432.0-438.0 MHz</td>
</tr>
<tr>
<td>L</td>
<td>1518-1559 MHz</td>
<td>1610.0-1626.5 MHz</td>
</tr>
<tr>
<td>L/S</td>
<td>1626.5-1660.5 MHz</td>
<td>1668-1675 MHz</td>
</tr>
<tr>
<td>S</td>
<td>2 483.5-2 550 MHz</td>
<td>1 610-1 626.45 MHz</td>
</tr>
<tr>
<td>S</td>
<td>2 170-2 200 MHz</td>
<td>1 980-2 010 MHz</td>
</tr>
<tr>
<td>S</td>
<td>2 025-2 110 MHz</td>
<td>2 200-2 290 MHz</td>
</tr>
<tr>
<td>Feeder Links: 5 091-5 250 MHz</td>
<td>Feeder Links: 6 875-7 055 MHz</td>
<td>GLOBALSTAR Feeder Links</td>
</tr>
<tr>
<td>Ka</td>
<td>12.75-14.50 GHz</td>
<td></td>
</tr>
<tr>
<td>X</td>
<td>17.30-18.10 GHz</td>
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</tr>
<tr>
<td>X</td>
<td>17.30-18.10 GHz</td>
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</tr>
<tr>
<td>X</td>
<td>17.700-20.200 GHz</td>
<td>27.50-31.0 GHz</td>
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<tr>
<td>Ka</td>
<td>21.400-22.000 GHz</td>
<td></td>
</tr>
<tr>
<td>Feeder Links</td>
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<td></td>
</tr>
<tr>
<td>Ka</td>
<td>24.75-25.25 GHz</td>
<td></td>
</tr>
</tbody>
</table>
COMMERCIAL SATELLITE SERVICES LICENSE

The Authority, in the exercise of the powers conferred upon it by Article 6(1)(10) of the Telecommunications Services Regulation Law, the applicable radio regulations which remain currently in force and subject to the terms and conditions set in the Commercial Satellite Services Regulations, grants to the Licensee specified, the following Ground Segment Authorization(s), Commercial Satellite Service License(s), Spectrum Permit(s) and or Registration(s) as per the general terms and conditions for radio spectrum licensing, specific terms & conditions, special conditions (if any) and technical schedule(s) of this License.

License Number: ...................................................................................................................................................
Spectrum Permit: ...................................................................................................................................................
Registration: ...........................................................................................................................................................
Licensee: ...............................................................................................................................................................
Address: ...............................................................................................................................................................  
License Category: ........................................................................................................................................................

Commencement and Termination Dates:
The License comes into effect on DD/MM/YY and subject to revocation or suspension, expires on DD/MM/YY unless renewed in accordance with the applicable Regulations. Commercial services provision will start XX calendar days after the effective date of this License.

Only the original or a certified copy of the Commercial Satellite Services License shall be considered valid.

License Department Manager
{Stamped Date}
{Stamped Seal}
## SPACE STATION DETAILS

<table>
<thead>
<tr>
<th>Name of Space Station:</th>
<th>Orbital Longitude:</th>
<th>Satellite Operator:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Carrier 1 characteristics:

<table>
<thead>
<tr>
<th>Band:</th>
<th>Tx frequency:</th>
<th>GHz</th>
<th>Bandwidth:</th>
<th>MHz</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Rx frequency:</td>
<td>GHz</td>
<td>Bandwidth:</td>
<td>MHz</td>
</tr>
</tbody>
</table>

Carrier modulation system:

### Carrier 2 characteristics:

<table>
<thead>
<tr>
<th>Band:</th>
<th>Tx frequency:</th>
<th>GHz</th>
<th>Bandwidth:</th>
<th>MHz</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Rx frequency:</td>
<td>GHz</td>
<td>Bandwidth:</td>
<td>MHz</td>
</tr>
</tbody>
</table>

Carrier modulation system:

### Carrier 3 characteristics:

<table>
<thead>
<tr>
<th>Band:</th>
<th>Tx frequency:</th>
<th>GHz</th>
<th>Bandwidth:</th>
<th>MHz</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Rx frequency:</td>
<td>GHz</td>
<td>Bandwidth:</td>
<td>MHz</td>
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</tbody>
</table>

Carrier modulation system:

### Carrier 4 characteristics:

<table>
<thead>
<tr>
<th>Band:</th>
<th>Tx frequency:</th>
<th>GHz</th>
<th>Bandwidth:</th>
<th>MHz</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Rx frequency:</td>
<td>GHz</td>
<td>Bandwidth:</td>
<td>MHz</td>
</tr>
</tbody>
</table>

Carrier modulation system:
**Fixed Earth Station Technical Schedule**

<table>
<thead>
<tr>
<th>FIXED EARTH STATION DETAILS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purpose of operation:</td>
</tr>
<tr>
<td>Site name:</td>
</tr>
<tr>
<td>Site location:</td>
</tr>
<tr>
<td>Earth Station name:</td>
</tr>
<tr>
<td>Name of Space Station:</td>
</tr>
<tr>
<td>Orbital Longitude:</td>
</tr>
<tr>
<td>Satellite Operator:</td>
</tr>
<tr>
<td>Earth Station Operation Start Date (if known):</td>
</tr>
<tr>
<td>Earth Station Latitude:</td>
</tr>
<tr>
<td>Earth Station height (base):</td>
</tr>
<tr>
<td>Antenna type / reference:</td>
</tr>
<tr>
<td>Antenna manufacturer:</td>
</tr>
</tbody>
</table>

**Antenna orientation**

<table>
<thead>
<tr>
<th>Operating angles:</th>
<th>Azimuth (from):</th>
<th>Azimuth (to):</th>
<th>Elevation:</th>
</tr>
</thead>
</table>

**Carrier 1 characteristics:**

<table>
<thead>
<tr>
<th>Tx frequency:</th>
<th>GHz</th>
<th>Bandwidth:</th>
<th>MHz</th>
<th>Max. eirp:</th>
<th>dBW</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rx frequency:</td>
<td>GHz</td>
<td>Bandwidth:</td>
<td>MHz</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tx ant. beamwidth (deg):</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tx ant. radiation pattern:</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

**Carrier 2 characteristics:**

<table>
<thead>
<tr>
<th>Tx frequency:</th>
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<th>MHz</th>
<th>Max. eirp:</th>
<th>dBW</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rx frequency:</td>
<td>GHz</td>
<td>Bandwidth:</td>
<td>MHz</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tx ant. beamwidth (deg):</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tx ant. radiation pattern:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Carrier 3 characteristics:**

<table>
<thead>
<tr>
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<th>Bandwidth:</th>
<th>MHz</th>
<th>Max. eirp:</th>
<th>dBW</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rx frequency:</td>
<td>GHz</td>
<td>Bandwidth:</td>
<td>MHz</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tx ant. beamwidth (deg):</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tx ant. radiation pattern:</td>
<td></td>
<td></td>
<td></td>
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</table>

**Carrier 4 characteristics:**

<table>
<thead>
<tr>
<th>Tx frequency:</th>
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<th>MHz</th>
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<th>dBW</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rx frequency:</td>
<td>GHz</td>
<td>Bandwidth:</td>
<td>MHz</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tx ant. beamwidth (deg):</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tx ant. radiation pattern:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Satellite Earth Station Network Technical Schedule

### SATELLITE EARTH STATION NETWORK LINKS

<table>
<thead>
<tr>
<th>Number of VSAT earth stations in network:</th>
<th></th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Network details:</th>
<th></th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Network configuration (e.g. Star, Mesh):</th>
<th></th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Location of hub:</th>
<th>Latitude:</th>
<th>Longitude:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Hub bit rate:</th>
<th>kpbs</th>
<th></th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Dependent VSAT uplink:</th>
<th>kpbs</th>
<th>Dependent VSAT downlink:</th>
<th>kpbs</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Satellite operator:</th>
<th></th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Name of space station:</th>
<th>Orbital longitude:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Carrier modulation system:</th>
<th></th>
</tr>
</thead>
</table>

## Transportable Earth Stations Technical Schedule

### FOR TRANSPORTABLE EARTH STATION

<table>
<thead>
<tr>
<th>Vehicle details:</th>
<th></th>
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</thead>
</table>

<table>
<thead>
<tr>
<th>Registration No:</th>
<th>Make and Model:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Name of Space Station:</th>
<th></th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Satellite Operator:</th>
<th></th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Antenna type / reference:</th>
<th>Antenna details:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Antenna manufacturer:</th>
<th>Antenna diameter:</th>
</tr>
</thead>
</table>

### Carrier 1 characteristics:

<table>
<thead>
<tr>
<th>Tx frequency:</th>
<th>GHz</th>
<th>Bandwidth: MHz</th>
<th>Max. eirp: dBW</th>
<th></th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
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<th>GHz</th>
<th>Bandwidth: MHz</th>
<th></th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Tx ant. beamwidth (deg):</th>
<th>Tx ant. radiation pattern:</th>
</tr>
</thead>
</table>

### Carrier 2 characteristics:

<table>
<thead>
<tr>
<th>Tx frequency:</th>
<th>GHz</th>
<th>Bandwidth: MHz</th>
<th>Max. eirp: dBW</th>
<th></th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Rx frequency:</th>
<th>GHz</th>
<th>Bandwidth: MHz</th>
<th></th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Tx ant. beamwidth (deg):</th>
<th>Tx ant. radiation pattern:</th>
</tr>
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</table>

### Carrier 3 characteristics:

<table>
<thead>
<tr>
<th>Tx frequency:</th>
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<th>Bandwidth: MHz</th>
<th>Max. eirp: dBW</th>
<th></th>
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</table>

<table>
<thead>
<tr>
<th>Rx frequency:</th>
<th>GHz</th>
<th>Bandwidth: MHz</th>
<th></th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Tx ant. beamwidth (deg):</th>
<th>Tx ant. radiation pattern:</th>
</tr>
</thead>
</table>

### Carrier 4 characteristics:

<table>
<thead>
<tr>
<th>Tx frequency:</th>
<th>GHz</th>
<th>Bandwidth: MHz</th>
<th>Max. eirp: dBW</th>
<th></th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Rx frequency:</th>
<th>GHz</th>
<th>Bandwidth: MHz</th>
<th></th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Tx ant. beamwidth (deg):</th>
<th>Tx ant. radiation pattern:</th>
</tr>
</thead>
</table>

### Restricted Locations:


Annex 5 – Application Forms for Commercial Satellite Services License

<table>
<thead>
<tr>
<th>Applicant’s Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Company Name</td>
</tr>
<tr>
<td>Contact Person</td>
</tr>
<tr>
<td>Address</td>
</tr>
<tr>
<td>P.O. Box</td>
</tr>
<tr>
<td>Telephone</td>
</tr>
<tr>
<td>Mobile</td>
</tr>
<tr>
<td>E-mail</td>
</tr>
</tbody>
</table>

Please submit the following documents along with this filled in application form:

The following documents in the list need to be submitted:
1. Detailed Technical specifications.
2. Copy of Approval/authorization from Ministry of Information and Culture (For Earth Stations transmitting broadcasting Content).
3. Copy of the Individual License for telecommunication service provision (For Earth stations providing telecom services).

**CATEGORY OF COMMERCIAL SATELLITE SERVICES LICENSE**

Mark every box that corresponds to the service requested:

- □ Category A: Space Segment Providers
- □ Category B: Bandwidth Resellers, including VSAT operators
- □ Category C: Earth Station License (EIRP above 0.5 kw/100 w including Hub Stations)
- □ Category D: Transportable Earth Stations (TES)
- □ Category E: Global Mobile Personal Communications Systems (GMPCS)
- □ Category F: Direct-Broadcast Satellite Television (DBSTV)
- □ Category G: Sales and Installation of Terminal Equipment

**FOR FIXED EARTH STATION**

Purpose of operation:

Site name:

Site location:

**FOR SATELLITE EARTH STATION NETWORK LINKS**

Number of VSAT earth stations in network:

Network details:

Network configuration (e.g. Star, Mesh):

Location of hub:  
Latitude:  
Longitude:  
Hub bit rate:  kbps

Dependent VSAT uplink:  kbps  Dependent VSAT downlink:  kbps

Satellite operator:

Name of space station:

Orbital longitude:

Carrier modulation system:

**FOR TRANSPORTABLE EARTH STATION**

Vehicle details:
<table>
<thead>
<tr>
<th>Earth Station name:</th>
<th>Name of Space Station:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orbital Longitude:</td>
<td>Satellite Operator:</td>
</tr>
<tr>
<td>Earth Station Operation Start Date (if known):</td>
<td>Earth Station Longitude:</td>
</tr>
<tr>
<td>Earth Station Latitude:</td>
<td>Antenna height (base):</td>
</tr>
<tr>
<td>Earth Station height:</td>
<td>Antenna height (center):</td>
</tr>
<tr>
<td>Antenna type / reference:</td>
<td>Antenna details:</td>
</tr>
<tr>
<td>Antenna manufacturer:</td>
<td>Antenna diameter:</td>
</tr>
</tbody>
</table>

**Carrier characteristics:**

<table>
<thead>
<tr>
<th>Tx frequency:</th>
<th>GHz</th>
<th>Bandwidth:</th>
<th>MHz</th>
<th>Max. eirp:</th>
<th>dBW</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rx frequency:</td>
<td>GHz</td>
<td>Bandwidth:</td>
<td>MHz</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**If more than one carrier, please provide details of all carriers:**

<table>
<thead>
<tr>
<th>Tx frequency:</th>
<th>GHz</th>
<th>Bandwidth:</th>
<th>MHz</th>
<th>Max. eirp:</th>
<th>dBW</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tx ant. beamwidth (deg):</td>
<td></td>
<td>Tx ant. radiation pattern:</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Rx frequency:</th>
<th>GHz</th>
<th>Bandwidth:</th>
<th>MHz</th>
<th></th>
<th></th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Rx frequency:</th>
<th>GHz</th>
<th>Bandwidth:</th>
<th>MHz</th>
<th></th>
<th></th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Rx frequency:</th>
<th>GHz</th>
<th>Bandwidth:</th>
<th>MHz</th>
<th></th>
<th></th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Rx frequency:</th>
<th>GHz</th>
<th>Bandwidth:</th>
<th>MHz</th>
<th></th>
<th></th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Rx frequency:</th>
<th>GHz</th>
<th>Bandwidth:</th>
<th>MHz</th>
<th></th>
<th></th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Rx frequency:</th>
<th>GHz</th>
<th>Bandwidth:</th>
<th>MHz</th>
<th></th>
<th></th>
</tr>
</thead>
</table>

| Tx ant. beamwidth (deg): |        | Tx ant. radiation pattern: |

**Antenna orientation**

<table>
<thead>
<tr>
<th>Operating angles:</th>
<th>Azimuth (from):</th>
<th>Azimuth (to):</th>
<th>Elevation:</th>
</tr>
</thead>
</table>

**Signature of applicant**

<table>
<thead>
<tr>
<th>Name (printed):</th>
<th>Date:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Authorized Signature of Applicant:</td>
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</table>

**ATRA section**

<table>
<thead>
<tr>
<th>Approved by:</th>
<th>Date of issue:</th>
</tr>
</thead>
<tbody>
<tr>
<td>License Number:</td>
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</tr>
</tbody>
</table>
## Annex 6 – Specific International Regulations for Satellite Communications

### Ku Band Frequency Usage Table

<table>
<thead>
<tr>
<th>Frequency Band Downlink</th>
<th>Frequency Band Uplink</th>
<th>Satellite Service</th>
<th>Authorization Type</th>
<th>User status in Afghanistan</th>
<th>Related International Regulations</th>
</tr>
</thead>
<tbody>
<tr>
<td>10.70-12.75 GHz</td>
<td>12.75-13.25 GHz</td>
<td>Fixed Satellite Service</td>
<td>SCS</td>
<td>Satellite Terminal (VSAT)</td>
<td>EN 301 428 EN 301 489-12 ERC/REC 13-03 / ERC/DEC/(00)08 ECC/DEC/(03)04 ECC/DEC/(06)02 ECC/DEC/(06)03 ERC/REC/01-07 ECC Report 66 ITU R S.726-1 ITU-R S.727-1 ITU-R S.728-1 ITU-R S.729</td>
</tr>
<tr>
<td>10.7-11.7 GHz</td>
<td>14.0-14.5 GHz</td>
<td>Fixed Satellite Service</td>
<td>SCS</td>
<td>Satellite Terminal (ESV)</td>
<td>ECC/DEC/(05)10 EN 302 340</td>
</tr>
<tr>
<td>10,70-11,70 GHz</td>
<td>14-14.50 GHz</td>
<td>Fixed Satellite Service</td>
<td>SCS</td>
<td>Satellite Terminal (Euteltracs)</td>
<td>ETS 300 255 ERC/DEC/(98)15 ERC/REC/01-07</td>
</tr>
<tr>
<td>10,7-12,75 GHz</td>
<td>14-14.50 GHz</td>
<td>Fixed Satellite Service</td>
<td>SCS</td>
<td>Satellite Terminal (Data Satellite Receiver)</td>
<td>ERC/DEC/(99)26 ERC/REC/01-07</td>
</tr>
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</table>
### Ka Band Frequency Usage Table

<table>
<thead>
<tr>
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<th>Frequency Band Uplink</th>
<th>Satellite Service</th>
<th>Authorization Type</th>
<th>User status in Afghanistan</th>
<th>Related International Regulations</th>
</tr>
</thead>
<tbody>
<tr>
<td>17.7-19.7 GHz</td>
<td>27.5-29.5 GHz</td>
<td>Fixed Satellite Service</td>
<td>SCS</td>
<td>Fixed Satellite Earth Station (Gateway)</td>
<td>ECC/DEC/(00)07 ECC/DEC/(05)08 ECC/DEC/(05)01 ITU-R S.524-9 EN 301 360 ITU-R Rec. 580-6 ECC Report 152</td>
</tr>
<tr>
<td>19.7-20.2 GHz</td>
<td>29.5-30.0 GHz</td>
<td>Fixed Satellite Service</td>
<td>SCS</td>
<td>Satellite Terminal</td>
<td>EN 301 459 EN 301 489-12 ECC/DEC/(05)08 ECC/DEC/(06)02 ECC/DEC/(06)03 ERC/REC/01-07 ECC Report 66 ECC Report 152 ITU-R S.524-9</td>
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### C Band Frequency Usage Table

<table>
<thead>
<tr>
<th>Frequency Band Downlink</th>
<th>Frequency Band Uplink</th>
<th>Satellite Service</th>
<th>Authorization Type</th>
<th>User status in Afghanistan</th>
<th>International Regulations</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 091-5 250 MHz</td>
<td>6 875-7 055 MHz</td>
<td>Mobile Satellite Service</td>
<td>SCS</td>
<td>Fixed Satellite Earth Station (Gateway)</td>
<td>EN 301 443 / EN 301 489-12</td>
</tr>
<tr>
<td>3 400-4 200 MHz</td>
<td>5 850-6 700 MHz 7 025-7 075 MHz</td>
<td>Fixed Satellite Service</td>
<td>SCS</td>
<td>Fixed Satellite Earth Station</td>
<td>EN 301 443 EN 301 489-12</td>
</tr>
<tr>
<td>3 400-4 200 MHz</td>
<td>5 850-6 700 MHz 7 025-7 075 MHz</td>
<td>Fixed Satellite Service</td>
<td>SCS</td>
<td>Satellite Terminal (VSAT)</td>
<td>EN 301 443 EN 301 489-12</td>
</tr>
<tr>
<td>3 700-4 200 MHz</td>
<td>5 925-6 425 MHz</td>
<td>Fixed Satellite Service</td>
<td>SCS</td>
<td>Satellite Terminal (ESV)</td>
<td>ECC/DEC/(05)09</td>
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</tbody>
</table>
### L Band Frequency Usage Table

<table>
<thead>
<tr>
<th>Frequency Band Downlink</th>
<th>Frequency Band Uplink</th>
<th>Satellite Service</th>
<th>Authorization Type</th>
<th>User status in Afghanistan</th>
<th>Related International Regulations</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 525-1 559 MHz</td>
<td>1 610.0-1 626.5 MHz</td>
<td>Mobile Satellite Service</td>
<td>GMPCS</td>
<td>Satellite Terminal</td>
<td>ECC/DEC/(04)09 ECC/DEC/(09)04</td>
</tr>
<tr>
<td>2 483.5-2 500 MHz</td>
<td>1 626.5 -1 660.5MHz</td>
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<td></td>
<td></td>
<td>ECC/DEC/(12)01</td>
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### S Band Frequency Usage Table

<table>
<thead>
<tr>
<th>Frequency Band Downlink</th>
<th>Frequency Band Uplink</th>
<th>Satellite Service</th>
<th>User status in Afghanistan</th>
<th>Related International Regulations</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 170-2 200 MHz</td>
<td>1 980-2 010 MHz</td>
<td>Mobile Satellite Service</td>
<td>Complementary Ground Component (CGC)</td>
<td>ECC/DEC/(06)09</td>
</tr>
</tbody>
</table>