المملكة الأردنية الهاشمية

# The Hashemite Kingdom of Jordan

## Telecommunications Regulatory Commission
## Radio Spectrum Management Department

**Application Form**
**For**
Issue\Renew\Amendment of
RADIO FREQUENCY LICENSE FOR
A Very Small Aperture Terminal (VSAT)


**Telecommunications Regulatory Commission (TRC)**

**Tel. (962-6)-5862020**
**Fax (962-6)-5863641/42**
**P.O. Box: 850967**
**Amman 11185 Jordan**

**Seventh circle, third exit to the right from**
**Airport Highway, Ibrahim El-Bajori street**
**http://www.trc.gov.jo**
**E-mail: trc@trc.gov.jo**
**spectrum@trc.gov.jo**

**I HEREBY APPLY FOR** (Make an X in the appropriate box(es))

☐ **1-New License**

☐ **2-Renewal of my Licence*** **(** No need to fill the technical information)

☐ **3-Amend My License**

Check one or more boxes that correctly describes the purpose of this Amend

| | |
|---|---|
| ☐ | request authority to add channel(s) |
| ☐ | request authority to change channel(s) |
| ☐ | request authority to increase EIRP by more than 1 dB in any direction |
| ☐ | request authority to increase antenna radiation center height above ground |
| ☐ | request authority to increase overall height of antenna structure |
| ☐ | request authority to change antenna polarization |
| ☐ | request authority to change transmitter emission type or bandwidth |
| ☐ | change antenna horizontal radiation pattern |
| ☐ | change azimuth of main horizontal lobe of radiation |
| ☐ | add or change visual frequency offset |
| ☐ | decrease EIRP |
| ☐ | change antenna radiation center height |
| ☐ | increase overall height of antenna above ground or building |
| ☐ | decrease overall height of antenna structure |
| ☐ | delete a channel(s) |
| ☐ | Change my station call sign |
| ☐ | Change my name on my license to my new name(Applicant's above) |
| ☐ | Change of mailing Address to above address |
| ☐ | correct erroneous information on license not involving a major change (submit an Annex if nature of correction(s) is not listed here). |
| ☐ | other facilities changes, please specify (submit Annex explaining changes) |

**Name:** _____.

**Former Name ( if Changed)** _____

**I certify that:** All statements and attachments are true, complete and correct to the best of my knowledge and belief and are made in good faith;

Date _____

Signed:_____

* Renewal means to renew the current license without any changes.

| **PURPOSE OF Applicant's OTHER APPLICATIONS PENDING (FOR TRC USE ONLY)**: |
|---|
| |

| **Previous Applications *( If applicable )*** | | |
|---|---|---|
| **Application Date** | **Application Result** | **Remarks** |
| | | |
| | | |
| | | |
| | | |

| **Current License Information *( If applicable )*** | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Type of License** | **License's Date** | **License's Current Status** | | | | | **Remarks** |
| | | **Valid** | **Terminated** | **Expired** | **Revoked** | **Modified** | |
| | | ☐ | ☐ | ☐ | ☐ | ☐ | |
| | | ☐ | ☐ | ☐ | ☐ | ☐ | |
| | | ☐ | ☐ | ☐ | ☐ | ☐ | |
| | | ☐ | ☐ | ☐ | ☐ | ☐ | |

**Duration:**

Please state the duration of the license being applied for;

Annual License

Short-Term (Please state required duration):----------

**Section A**

***Applicant Details***

Company Name ……...……...

Address ……

…..……

……

Telephone number …….

Fax. Number ……..

Name of contact person …….

Company registration …….

Web Site/ E-mail …….

Shareholding structure ……...

……

……

Relevant experience and technical expertise (including key staff and their experience)

……

……

……

The relationship between the applicant and the service provider and/or any Jordanian intermediate party (delegate) with submitting signed and certified copies of any contracts regarding authorization, provisioning, installation and/or maintenance if exist.

……

……

……

Type of service data, video, audio, phone, etc. Is it for own use or use of third parties? For VSAT network describe; (Include attachments)

(1) The setting-up and management of Closed User Group (creation, location and management of user database)
(2) Dependant addressing mode
(3) The procedures for introducing a new dependant station

……

……

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……

……

Details of financial resources ……...

……

……

……..

……..

Billing address……..

……

……

**DECLARATION**

I declare that the information given on this form and other information given in support of this application is correct and complete to the best of my knowledge.

Signed…… Date …….

Name (BLOCK LETTERS)…….

Status……

Official Stamp ( Applicant official stamp):……

**Note:**

For each individual station the information in the following section should filled out individually and attached as requiered.

**Section B**

**Network Details:**

Type of V-SAT network (e.g. star, mesh)……

Classification of Network…….

Location of the Hub (Country and coordinates):

…… (If in Jordan, please include coordinates)

Hub Station Bit rate ……kbit/s

Dependent VSAT Stations:

Uplink:…… kbit/s

Downlink:…… kbit/s

**Space Station Details**

Name of Space Station:**.....**

Nominal Orbital Longitude:

**Degrees** ☐☐.☐☐ **E/W** ☐

Name of Satellite Operator or Agency **.....**

Carrier Modulation System: **.....**

Multiple Access Technique(s) (if applicable): **.....**

**.....**

**Number of Stations:**

Please state the number of VSAT earth stations included in this application, ☐☐☐

The VSAT should operates through a geostationary satellite at least 3° away from any other geostationary satellite operating in the same frequency band and covering the same area, provide as attachment the documents which indicate the above specially form the ITU.

**Attachment No.:** ☐

Please indicate and attach the ITU circular(s) which prove the above and state that this space station in coordinated with the Administration of Jordan to cover the Jordanian territories.

**Attachment No.:**

**Section C**

**V-SAT Equipment Information**

Equipment designation……

Model……...

Type of antenna……..……..

Size of antenna……..

**Characteristics of the transmitting antenna**

Maximum isotropic gain: dBi…… 3dB beamwidth……..

| | |
|---|---|
| **Please give details of polarization configuration:**<br><br>Transmit:_____ | Radiation Pattern:<br><br>Attachment Number<br><br>Please attach softcopy diagram and text file of the Radiation pattern. |

For each type of modulation indicate; total peak envelope power and power density per Hz supplied to the input of the antenna.

| **Designation Emission** | **Total peak power dBW** | **Maximum power Density Dbw/Hz** |
|---|---|---|
| | | |
| | | |
| | | |
| | | |

**Characteristics of the transmitting antenna**

Maximum isotropic gain: dBi…… 3dB beamwidth……..

| | |
|---|---|
| **Please give details of polarization configuration:**<br><br>Transmit:_____ | Radiation Pattern:<br><br>Attachment Number ☐☐<br><br>Please attach softcopy diagram and text file of the Radiation pattern. |

For each type of modulation indicate; total peak envelope power and power density per Hz supplied to the input of the antenna.

| | |
|---|---|
| **Max. Aggregate Power (Transmit):** | ☐☐☐ **dBW** |
| **EIRP** | ☐☐☐☐ **W** |

What is the off-axis spurious EIRP in dBpW / 100 KHz and in dBpW / 1Hz from the VSAT, for all off-axis angles greater than 7° ( include documents)

**Off-axis spurious EIRP** ☐☐☐ **dBpW/ 100 KHz**

**Off-axis spurious EIRP** ☐☐☐ **dBpW/ 1 Hz**

**Characteristics of the receiving antenna**

Maximum isotropic gain (dBi)…….…… 3dB beamwidth……

Receiving system noise temperature (degrees Kelvin)……

Antenna radiation pattern diagram attached, (Text and figure) attach file……

**Section D**

**Station Details**

On which date will V-SAT operations start?……...

Name of the V-SAT network……...

Equipment designation…….

Address of V-SAT network

……..

……

……..

Associated Space Station…….

Nominal Orbit Longitude…….

Operating angles……...

| | |
|---|---|
| **1**: Station Reference Name: _____ | |
| **2**: Location Name: _____ _____ | **3**: Intended date of bringing Earth Station into operation: **D**☐☐ **M**☐☐ **Y**☐☐ |
| **4**: Longitude: Degrees ☐☐ E ☐☐ ☐☐ | 5:Latitude: Degrees ☐☐ N ☐☐ ☐☐ |
| **6**: **Site Height (a.s.l)** ☐☐ ☐☐ **Meters** | **7**: **Antenna Height (a.g.l)** ☐☐ ☐☐ **Meters** |
| **8: The height at the base of the aerial system above sea level?……. Meters** | **9: The height of the center of the antenna above sea level?……. Meters** |

**Section E**

**Transmitting**

Satellite receiving beam designation……..

**Characteristics common to the following list of assigned frequencies**

Assigned frequency band…….

Modulation Type…….

**Emission transmitted on the assigned frequencies listed below:**

| **Designation of Emission** |
|---|
| |
| |
| |
| |
| |
| |

**List of assigned frequencies having the above common characteristics;**

| Transponder or spot frequency | Assigned Frequency/GHz | BW(kHz) |
|---|---|---|
| | | |
| | | |
| | | |
| | | |

**Actual Transmit & Receive Details of the station:**

| **1:** Transmit Frequency (GHz) | Bandwidth (kHz) | **2**: Emission designation (Transmit) **Bandwidth** | **Emission** | **Designation** |
|---|---|---|---|---|
| _____ | _____ | ☐☐☐☐ | ☐☐☐ | ☐☐ |
| _____ | _____ | ☐☐☐☐ | ☐☐☐ | ☐☐ |
| _____ | _____ | ☐☐☐☐ | ☐☐☐ | ☐☐ |
| _____ | _____ | ☐☐☐☐ | ☐☐☐ | ☐☐ |
| _____ | _____ | ☐☐☐☐ | ☐☐☐ | ☐☐ |

| **2:** Receive Frequency (GHz) | Bandwidth (kHz) | **2**: Emission designation (Receive) **Bandwidth** | **Emission** | **Designation** |
|---|---|---|---|---|
| _____ | _____ | ☐☐☐☐ | ☐☐☐ | ☐☐ |
| _____ | _____ | ☐☐☐☐ | ☐☐☐ | ☐☐ |
| _____ | _____ | ☐☐☐☐ | ☐☐☐ | ☐☐ |
| _____ | _____ | ☐☐☐☐ | ☐☐☐ | ☐☐ |
| _____ | _____ | ☐☐☐☐ | ☐☐☐ | ☐☐ |

**Section F**

**Modulation Characteristics**

For any type of modulation please (where applicable) indicate the characteristics of energy dispersal:

……

……

……

…….

**FM**

For a carrier frequency modulated by a frequency division multi-channel telephone baseband (FDM-FM) or by a signal that can be represented by a multi-channel telephony baseband frequency.

What are the lowest and highest frequencies of the baseband and the arms frequency deviations of the baseband and the test tone as a function of baseband frequency?

Lowest_____Highest_____Deviations_____

**PM**

For a carrier phase-shift modulated by a signal

Please indicate the bit rate and the number of phases

Bit rate_____Number of phases_____

**Section G**

**Receiving**

Satellite transmitting beam designation……

Characteristics common to the following list of assigned frequencies:

Assigned frequency band…….

Emission received on the assigned frequencies listed below:

| Designation of Emission |
|---|
| |
| |
| |
| |
| |
| |
| |

List of assigned frequencies having the above common characteristics

| Transponder or Spot Frequency | Assigned Frequency/GHz | BW/ kHz |
|---|---|---|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

# Guidance Notes for Licensing of a VSAT network in the Fixed Satellite Service

## Section B

**Name of the VSAT network** ----------Indicate the name by which the VSAT network will be known.

**Associated Space Station**----------Indicate the name of the associated space station with which communication is to be established.

**Nominal Orbital Longitude**----------Enter the Nominal longitude of the orbital position of that of the satellite expressed in decimal degree E or W (the value should not exceed 180 degree)

## Section C

A separate Section C is required for each terminal that has different characteristics.

**Equipment Designation**----------Enter designator by which this VSAT terminal configuration will be known on this network. This designator will be used when registering the location of a terminal using section D of this form.

**Type of Antenna**----------i.e. Cassegrian etc.

**Maximum Isotropic Gain**---------Enter the gain (Gi; see RR 154) of the antenna in the direction of maximum radiation, expressed in dBi.

**Beamwidth**---------- Enter the total beamwidth at the mean half-power points of the main lobe, expressed in decimal degrees. Describe in detail in attachment if not symmetrical.

**Radiation Pattern**----------If a reference radiation pattern cannot be indicated by one of the symbols below, or the measured radiation diagram of the antenna is available, give the relevant information in an attachment. If an attachment is provided enter a figure number identifying its presence.

| Symbol | Description of the Radiation Pattern |
|---|---|
| **REC-465** | Current version of ITU-R Recommendation 465; "Reference earth station radiation pattern for use in co-ordination and interference assessment in frequency range form 2 to 30 GHz |
| **REC-580** | Current version of ITU-R Recommendation 580; "Radiation diagrams for use as design objectives for antennas of earth stations operating with geostationary satellite". |
| **AP28** | Point 4, Annex II of Appendix 28<br>Note; This radiation diagram is identical to that in Annex III to Appendix 29 |
| **Designation of Emission** | Is made up of three parts, bandwidth (four characters), emission (three characters) and description of emission (two characters). This makes a nine-character emission code. See Guide to Class of emission RR Article 4. E.g. 30MOF8FHN is 30MO = 30MHz, F = Frequency modulated, 8 = Composite system with one or more channel containing analogue information, F = Television (video), H = Sound of broadcasting quality (stereophonic or quadraphonic), N = No multiplexing employed. |
| **Total Peak Power** | Enter the appropriate sign( + or -) and the value of the total peak envelope power (RR151) expressed in dBW for the corresponding emission |
| **Maximum Power Density** | Enter the appropriate sign (+ or -) followed by the value of the maximum power density per Hertz (expressed in dBW/Hz) supplied to the input to the antenna averaged over the worst 4KHz band. For narrow band carriers with a necessary bandwidth (RR146) less than the reference bandwidth, the peak power should be averaged over the reference bandwidth (4KHz) to obtain this value of maximum power density. The most recent version of ITU-R Report 792 should be used to the applicant in calculating the maximum power density per Hz. |
| **Receiving system** | Enter the value of the lowest total receiving system noise |

| | |
|---|---|
| **noise temperature** | temperature expressed in degrees Kelvin, referred to the output of the earth station antenna under clear sky conditions. |
| **Section D** | A separate Section D is required for each location that a VSAT terminal is installed |
| **Section E** | All emission are to be contained in the frequency band (…) GHz |
| **Satellite receiving beam designation** | Enter the receiving beam designation by a symbol consisting of up to three characters. For practical reasons, there are different approaches for the designation of the beam. It may consist of:-<br>(a) Numbers such as 1,2,3, etc. which refer to the number of the figures representing the corresponding antenna gain contour published in the relevant special section; or<br>(b) Numbers such as 195, which identify a beam having a maximum gain of 19.5dB; or<br>(c) A symbol of up to three letters (or a letter and a figure), which is used to represent the abbreviated beam name such as G for global, NWQ for north west quadrant, WH for west hemisphere, Z1 for zone 1, 0 for omnidirectional.<br>For a steerable, the last character shall always be the letter "R". |
| **Assigned frequency band** | Enter the bandwidth of the assigned frequency band defined in RR141, expressed in KHz, the assigned frequency band should in no case exceed the bandwidth of a single associated satellite transponder. |
| **Designation of emission** | Is made up of three parts, bandwidth (four characters) emission (three characters) and description of emission (two characters), this makes a nine character emission code. See guide to class of Emission RR Article 4; i.e. 30MOF8FHN is 30MO=MHz, F= Frequency modulated, 8= composite system with one or more channels containing analogue information, F= Television (video), H= Sound of broadcasting quality (stereophonic or quadraphonic), N= No multiplexing employed. |
| **Assigned Frequency** | If the transponder or a spot frequency within a transponder enter letter T or S as appropriate. Enter the center of the frequency band to be used, in KHz inclusive, in MHz above |

28000 KHz 10500 MHz inclusive, and in GHz above 10500 MHz

**Section G**

**Satellite transmitting beam designation**

Enter the receiving beam designation by a symbol consisting of up to three characters, For practical reasons, there are different approaches for the designation of the beam. It may consist of:

(A) Numbers such 1,2,3, etc. which refer to the number of the figure representing the corresponding antenna gain contour published in the relevant Special Section; or

(B) Numbers such 195, which identify a beam having a maximum gain of 19.5dB; or

(C) A symbol og up to three letters (or a letter an a figure), which is used to represent the abbreviated beam name such as G for global, NWQ for north west quadrant, WH for west hemisphere, Z1 for zone 1, O for omnidirectional.

For a steerable, the last character shall always be the letter "R"

**Assigned frequency band**

Enter the bandwidth of the assignment frequency band as defined in RR141, expressed in KHz, the assigned frequency band should in no case exceed the bandwidth of a single associated satellite transponder.

**Designation of emission**

Is made up of three parts, bandwidth (four characters), emission (three characters) and description of emission (two characters). This makes a nine-character emission code. See guide to Class of Emissions RR Article 4;i.e. 30MOF8FHN is 30MO=MHz, F = Frequency modulated, 8 = composite system with one or more channels containing analogue information,

F = Television (video), H = sound of broadcasting quality (stereophonic or quadraphonic), N = No multiplexing employed.

**Assigned Frequency**

If the stranponder or a spot frequency within a trasponder enter letter T or S as appropriate. Enter the center of the frequency band to be used, in KHz inclusive, in MHz above 28000 KHz 10500 MHz inclusive, and in GHz above 10500 MHz.

***All applicants submitting a model that has already been granted type approval by TRC, must abide to the following conditions:***

- A TRC Declaration form in Annex 1 must be completed.
- A TRC Safety Declaration form in Annex 2 must be completed.
- A TRC Emissions Declaration form in Annex 3 must be completed
- Only equipment from the declared source of import is allowed to be marketed and sold in Jordan. The applicant will be required to re-apply for a new type approval if the source of import has changed.
- A letter or a proof from the declared source of import stating the models supplied to the applicant.

**Annex 1**

**Declaration** ** To be completed by all applications **

Please complete the rest of the application before signing this declaration

To the best of my knowledge and belief the particulars given in this document are correct and complete.

I have read the application notes, statements and conditions and will supply the necessary information ( the attached) with my application.

I,(Name & Title) _____

Position in Company _____

For and on behalf of_____ (Name of Company) located at Address _____

Do solemnly and sincerely declare that the following telecommunication equipment:

Manufacturer _____ Model No. _____

imported from :

Company _____

Address_____

Country_____

Contact Person (if possible) _____
Tel _____ Fax _____
E-mail _____

Complies with _____**,** and _____
_____, and _____
Standards and shall ensure that only radio communications equipment from the above declared source will be marketed and or operated and/or sold in Jordan.
I shall re-apply for type approval if the source of the above radio communications is different from the one declared above.

_____ _____

Signature & Name for and on behalf of (Name of Company )

Date

## Annex 2

| **Safety Declaration** | ** To be completed by all applications ** |
|---|---|

I (We), Declare that I (We) have the safety test result relating to the radio communication equipment mentioned in this form as identified overleaf .
I (We) declare on my (our) sole responsibility that the radio communication equipment is in conformity with the following safety standard(s) and/or normative document(s) :

_____**,** and _____
_____, and _____

| **Telecommunications equipment information** : |
|---|
| Manufacturer _____ Model No. _____ |
| |
| **imported from** : |
| Company _____ |
| |
| Address _____ |
| |
| Country _____ |
| |

(Name & Title) _____

Position in Company _____

For and on behalf of_____ (Name of Company) located at Address _____

_____ _____
Signature & Name for and on behalf of Date

**Annex 3**

| **Declaration** | ** To be completed by all applications ** |
|---|---|

Please complete the rest of the application before signing this declaration

I (We) declare on my (our) sole responsibility that the concerned product in this application is conformity with the following:

1. Any possible method should be done to enable the most efficient use of spectrum, such as Bandwidth expansion, amplitude modulation and single-sideband techniques.
2. Frequency tolerance of the center frequency used by the concerned product must comply with the ones specified in table1.
3. Maximum spurious emission power level from the concerned product should be within the range specified in table2.
4. Frequency tolerances and levels of unwanted emissions should be at the lowest value which the service permits.
5. In case of using Bandwidth-expansion techniques, power spectral density should be employed in such manner that ensures efficient use of the spectrum.
6. Technical parameters of the receiving station should be considered so as to comply with the class of emission concerned.
7. Interference caused by a transmitter located at a close distance from the receiver should be minimized using the appropriate performance characteristic & parameters.

_____ _____

Signature & Name for and on behalf of (Name of Company ) Date

***PLEDGE***

I, the undersigned, acknowledge that to the best of my ability I have fully read and understood all the terms and conditions in this application form and completed it accurately.

| Applicant's Name | Signature | Date |
| --- | --- | --- |
| --- | --- | --- |

Application received by

Name:
Signature:
Date:

ملاحظة: يجب أن تختم جميع الصفحات بالختم الرسمي لمقدم الطلب.

Company Stamp_____

This application form is intended to provide TRC with all the necessary information needed for evaluation purposes. Any item , phrase condition ,statement etc indicated in this application will not considered as obligatory for TRC if it is not fully comply with the TRC's relevant regulations, instructions and rules currently adopted by TRC or are not based on an official statement by TRC . In any case any of these information ( items, phrases , conditions, statements etc) indicated in the application or provided by the applicant are obligatory to the applicant but not for the TRC.

# Commitment

I, the undersigned, acknowledge that I will comply with the following commitments upon getting a radio station license:

1. Submission of this application within a maximum of one year from its date, otherwise the application will be cancelled.
2. Importing the equipment during the license validation time, otherwise the approval will be cancelled.
3. Using the equipment as it is described in the license.
4. Not using any kind of unclear messages, coded messages over the radio equipment.
5. Using the equipment for the purpose that it is licensed for.
6. Not allowing unauthorized persons to use the radio equipment.
7. Not transferring the ownership of any of the radio equipment to other party unless getting an official approval issued from TRC.
8. Allowing any official team to inspect on the radio stations at any time to check it's technical specifications, it’s conformation with the license and it's operators.
9. Suspend the using the radio stations in case the authorized entities asked for it.
10. Reporting to the Telecommunications Regulatory Commission and other relevant governmental entities in case of loosing any equipment or reporting to the T.R.C upon destroying, storing, or re exporting any equipment.
11. Returning back the radio equipment-carrying permit to the Telecommunications Regulatory Commission when the mission of the persons that are allowed to operate the equipment is completed.
12. Providing the names of the persons that operate the equipment to the Telecommunications Regulatory Commission in case of license renewal, and the names of the new persons that will receive equipment or the persons who are dismissed from using the equipment.
13. Providing the Telecommunications Regulatory Commission with a statement includes types, serial numbers and numbers of the radio equipment and a written certificate states that do not have except the mentioned equipment when asking for license renewal.
14. Providing the Telecommunications Regulatory Commission with a reinforcement letter from the governmental entity that has the contract with, and a photocopy of that contract.
15. Providing the Telecommunications Regulatory Commission with a customs certificate includes the number, brand, type and serial number of the equipment upon entering or exiting them to the country.
16. Shouldering any responsibility that results from not complying with any part of this commitment.
17. Meet any relevant technical requirements to make my telecommunications facilities reasonably capable and available for the implementation of judicial, administrative and national security requirements and to co-operate with the TRC and its authorized representatives in the exercise of the functions assigned to the TRC under the Telecommunications Law for carrying out such requirements.

**Signature of applicant----------**

**Name (BLOCK CAPITALS)----------Date----------**

**If you are signing on behalf of a Company or organisation state:-**

**Name of Company/Organisation ----------**

**Position----------**

**Company/Organisation Stamp**

**Return this application form to: -**

**Telecommunications Regulatory Commission**
**Radio Spectrum Management Department**
**Amman**

Tel. (962-6)-5862020
Fax (962-6)-5863641/42
P.O. Box: 850967
Amman 11185 Jordan

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Seventh Circle, Ibrahim El-Bajori Street
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spectrum@trc.jo