

# Suruhanjaya Komunikasi dan Multimedia Malaysia

Malaysian Communications and Multimedia Commission MCMC Tower 1, Jalan Impact, Cyber 6 63000 Cyberjaya, Selangor Darul Ehsan

Tel: 6 03-86888000 Fax: 6 03-86881000 http://www.mcmc.gov.my

# APPLICATION FOR APPARATUS ASSIGNMENT(S) (FIXED SERVICE: EARTH STATION)

☐ New apparatus		Type of apparatus (Please refer to instructions):			Application Fee RM 60		
☐ Existing apparatus	Client ID No.:		Assignment No.(s):		Call sign	:	Per Application
To be used when app	olying for s			atus assi	ignment(s)		
1. CLIENT INFORMAT	ION						
Organization Name:							
Applicant Name:							
Business / Residential Address	s:						
Town / State:					Postal Code:		
Billing Address:							
(if different from above):					Postal Code:		
Telephone (office/home):			Fax:		E-mail:		
Contact Person:					Company / Busine Reg. No.:	ss	
Nature of Business:					IC No.:		
2. APPLICATION INFOR	MATION						
2. APPLICATION INFORM Proposed Use of System / System Description:	MATION						
Proposed Use of System /		ATION					
Proposed Use of System / System Description:		ATION					
Proposed Use of System / System Description: 3. GEOGRAPHIC AREA		ATION					
Proposed Use of System / System Description:  3. GEOGRAPHIC AREA Location Name:		ATION					
Proposed Use of System / System Description:  3. GEOGRAPHIC AREA Location Name: Site Address:		ATION					
Proposed Use of System / System Description:  3. GEOGRAPHIC AREA Location Name: Site Address: Town / State:		ATION					
Proposed Use of System / System Description:  3. GEOGRAPHIC AREA Location Name: Site Address: Town / State: Postal Code:		ATION					
Proposed Use of System / System Description:  3. GEOGRAPHIC AREA Location Name: Site Address: Town / State: Postal Code: Apparatus Name:	INFORMA	ATION					
Proposed Use of System / System Description:  3. GEOGRAPHIC AREA Location Name: Site Address: Town / State: Postal Code: Apparatus Name: Latitude / Longitude (°N/°E): Ground Elevation:	INFORMA	ATION					
Proposed Use of System / System Description:  3. GEOGRAPHIC AREA Location Name: Site Address: Town / State: Postal Code: Apparatus Name: Latitude / Longitude (°N/°E): Ground Elevation: (meters above mean sea leve	INFORMA	ATION					
Proposed Use of System / System Description:  3. GEOGRAPHIC AREA Location Name: Site Address: Town / State: Postal Code: Apparatus Name: Latitude / Longitude (°N/°E): Ground Elevation: (meters above mean sea leve Structure Height (m):	INFORMA	ATION  Yes			□ No		

Class of Earth Station:		
Modulation Type:	☐ Analog	☐ Digital
Operating Azimuth:	Upper Limit:	
Operating Azimuth:	Lower Limit:	
Receiver Reference: Bandwidth (kHz):		
Receiver Noise Temps (K):		
Coordination Area Diagram :		
Note: If necessary, please provide additi	onal attachmer	nt together with this form.
A. FREQUENCY INFORMATION	l	
Desired Transmit Frequency (MHz):		
Desired Receive Frequency (MHz):		
Bandwidth (MHz):		
Designation of Emission:		
B. ANTENNA INFORMATION		
Antenna Diameter:		
Polarization:		
Radiation Pattern:		
Manufacturer and Model:		
Antenna Gain (dB):		
Azimuth of Main Beam:		
Beamwidth (° ):		
Elevation Angle (°):		
Height Above Ground (m):		
Antenna Displacement (m): (For antenna farm only):		
Latitude / Longitude (°N/°E):		
C. APPARATUS INFORMATION		
Transmitter Manufacturer:		
Transmitter Model / Serial No:		
Transmitter Power (watts):		
Receiver Manufacturer:		
Receiver Model / Serial No:		
Type Approval No:		
Transmission Line Length (m):		
Line Type (RG8, RG213 etc):		
5. TECHNICAL INFORMATION (Information from Satellite Provider)	- ASSOCIA	ATED SPACE STATION
A.GSO	1	
Name of Associated Space Station:		
Operational Satellite Network:		

## RSAD/AAP-F02

ITU (BRIFC) Special Section Reference Number:			
Orbital Position (°E /°W):			
Beam Designation:			
Transmit Gain (dB):			
Power Flux Density (dBW/m²):			
Or <b>B.NGSO</b>			
Name of Associated Space Station:			
Operational Satellite Network: (ITU filing name):			
ITU (BRIFC) Special Section Reference Number:			
Inclination Angle ( ° ):			
Apogee (km):			
Perigee (km):			
Beam Designation:			
Transmit Gain (dB):			
Power Flux Density (dBW/m²):			
6. DO YOU HAVE A LICENCE / 1998? IF YES, PLEASE PRO		COMMUNICATIONS AND MUL DF YOUR LICENCE / ASSIGNM	
7. PLEASE STATE THE REQUIR	RED VALIDITY DATE AND P	ERIOD	
-	Date assignment is issued OR		
Date:	Date required	(please state the	date)
Period (from 3 months to 1 year):			
	1		

8. I CERTIFY THAT THE STATEMENTS MADE IN THIS APPLICATION ARE COMPLETE AND CORRECT TO THE BEST OF MY KNOWLEDGE; THE APARATUS IS TYPE APPROVED FOR USE IN MALAYSIA AND IT WILL BE USED ONLY FOR THE PURPOSES AUTHORIZED BY THE MINISTER OF COMMUNICATIONS AND MULTIMEDIA MALAYSIA

Signature:	Date:	
Name of Signatory:	I.C No.:	
Business / Company stamp:		

### FOR MCMC USE ONLY

Fee Paid:	
Cheque or Bank in Slip No.:	
Receipt No. / Date:	
Spectrum Plan Checked:	

# EXPLANATORY NOTE FOR COMPLETING THE APPARATUS ASSIGNMENT APPLICATION FORM FOR SATELLITE EARTH STATION (E/S)

## 1. INTRODUCTION

This Explanatory Note is to guide the applicant in completing the Apparatus Assignment(s) for Satellite Earth Station Application Form.

The satellite earth station form is to be completed by the applicant and submitted to the MCMC office for the Earth station apparatus: -

Please complete SATELLITE EARTH STATION FORM (please refer to note \*) for each antenna. Application Fee is **RM 60.00** per application. The applicants are requested to submit the annual fee associated with the each station being applied. Assignment will not be issued until full payments of all appropriate fees have been received.

Cheque or money orders should be made payable to:

### "SURUHANJAYA KOMUNIKASI DAN MULTIMEDIA MALAYSIA"

## 2. DETAIL INSTRUCTION FOR FILLING OUT NOTICE FORMS

The instructions for filling out the individual data items on SATELLITE EARTH STATION FORM (please refer to note \*) are given below:

### \*Note:

If the application is for a new station, i.e. the applicant does not have any licensed transmitters or receivers at the location, please indicate this by checking the "New apparatus" box. Note: If the client has existing license(s) /assignment (s), then the client ID number field should be completed to assist MCMC staff in locating the applicant's information.

Please indicate if the application is for a change in an existing apparatus assignment, such as a change of frequency, the addition of new frequency or a change of location. Please indicate this by checking the "Existing apparatus" box, entering the client ID number, the assignment number, and the call sign, found on the existing license(s) / assignment(s), in the appropriate fields on the form.

### 3. CLIENT INFORMATION

This section requests particular information on the applicant (individual, business or company). Please indicate your Business / Residential address for Assignment and other correspondence. Please indicate if a separate address is needed for all billing correspondences. This section will provide MCMC with contact information:-

Item	Data Name	Description(s)
3.1	Organization name:	Name of the operating company or agency;

3.2	Applicant Name:	Name of the person responsible for this application;
3.3	Business/ Residential Address:	Address of the operating agency;
3.4	Company/ Business Reg. No:	Registration number of the company;
3.5	Contact Person:	Applicant contact person;
3.6	Nature of Business:	Type of business.

# 4. APPLICATION INFORMATION

This section requests information on the proposed use of the apparatus or system and a brief description of the actual system. If more space is required, please provide attachment.

# **5. GEOGRAPHIC AREA INFORMATION**

The information requested in this section pertains to the physical characteristic of the location of the apparatus:-

Item	Data Name	Description(s)
5.1	Location Name:	Location of Earth station(E/S);
5.2	Site address:	Postal address of the Earth Station site;
5.3	Apparatus Name:	Name of the apparatus (name of the Earth Station);
5.4	Earth Station Latitude/ Longitude:	Geographical position of the Earth Station(°N/°E);
5.5	Ground Elevation:	The elevation above mean sea level of the ground at the site of the Earth Station (m)
5.6	Structure High:	The height of the antenna structure(m);
5.7	Building High:	The high of the building (m);
5.8	Transportable:	Either Earth Station is transportable or not.

# **6. TECHNICAL INFORMATION - EARTH STATION**

The information requested in this section pertains to the physical characteristic of the location of the apparatus:-

Item	Data Name	Description (s)
6.1	Class of Earth Station:	Indicate the appropriate class of station and the nature of service;
6.2	Modulation Type:	A code indicating how the information carried by the signal is encoded on to the carrier frequency as follows:- AM-SSB-TV- Amplitude Modulation SSB-TV AM-VIDEO- Amplitude Modulation Video (Audio Sub-Carrier) ASK- Amplitude Shift Keying DAV- Data Above Voice DIV- Data in Voice DUV- Data Under Voice FDM- Frequency Division Multiplex- Frequency FM- Modulation FM Video- Frequency Modulation Video FSK- Frequency Shift Keying MSK- Minimum Shift Keying OQPSK- Offset Quadrate Phase Shift Keying PSK- Phase Shift Keying QAM-Quadrate Amplitude Modulation QPR- Quadrate Partial Response QPRS- Quadrate Phase Shift Keying
6.3	Operating Azimuth:	An angle measured from true north in which the direction of the maximum radiation of the antenna points.
6.4	Receiver reference bandwidth:	The frequency bandwidth that receiver use as the reference in kHz
6.5	Receiver Noise temperature:	The total receiving system noise temperature(K);
6.6	Coordination area diagram station	Please provide the attachment number in the box and the earth coordination diagrams. The diagrams shall be drawn to an appropriate scale and indicating as follows:-  a. Both transmission(Tx) and reception(Rx);
		b. The location of earth station and its associated coordination areas;
		c. The coordination area relate to the service area which it is intended to operate the mobile earth station.

# **6. A. FREQUENCY INFORMATION**

Please enter the frequency on which communications are desired.

Item	Data Name	Description (s)
6.A.1	Desired Transmit Frequency:	The desired frequency of the transmitting station (MHz);
6.A.2	Desired Receive Frequency:	The desired frequency of the receiving station (MHz);
6.A.3	Bandwidth:	The width of a frequency band which is required( MHz);
6.A.4	Designation of emission:	Emissions shall be designated according to their necessary bandwidth and their classification in accordance with the method described by ITU Radio Regulation in Appendix 1 of Volume 1.

# **6. B. ANTENNA INFORMATION**

Please provide information on the make and model of the antenna as well as it's the technical characteristic, the elevation angle (level=0), and the height of the antenna above the ground:-

Item	Data Name	Description(s)
6.B.1	Antenna Diameter:	Diameter of the antenna(m);
6.B.2	Polarization:	The polarization of the radio wave:-
		H-Horizontal, V-Vertical;
6.B.3	Radiation Pattern:	The assignments associated with the beam are to a space station on board a geostationary satellite and the antenna beam is directed towards another satellite;
6.B.4	Manufacturer and model:	Detail description about manufacturing and model data of the equipment;
6.B.5	Antenna gain:	The ratio of the maximum radiation to that of a reference antenna for equal power(dB);
6.B.6	Azimuth of main beam:	Horizontal angle of main beam area;
6.B.7	Beam width:	The total beam width of the mean half-power points of the main lobe, express in decimal degree(°);
6.B.8	Elevation Angle:	Antenna elevation of the antenna in maximum radiation direction (°);
6.B.9	Antenna Displacement:	For antenna farm only(m);

6.B.10	Latitude/ Longitude	The geographical position of the antenna (°N/°E).

## **6. C. APPARATUS INFORMATION**

Please provide information on the make, model and serial number of the transmitter, receiver being employed at the station. Included are fields requesting the transmitter output power and type approval number. Please attach technical specifications and brochure of the equipment:-

Item	Data Name	Description (s)
6.C.1	Transmitter Manufacturer:	The manufacturer of the equipment;
6.C.2	Transmitter Model/ Serial No:	Model and serial number of the transmitter;
6.C.3	Transmitter Power:	The rated power of the transmitter in Watt
6.C.4	Receiver Manufacturer:	The manufacturer of the equipment;
6.C.5	Receiver Model/ Serial No:	Model and serial number of the receiver;
6.C.6	Type Approval No:	Approval no.;
6.C.7	Transmission line length:	The length of the transmission line(m);
6.C.8	Line type:	Type of line (R68, R6213 etc)

# 7. TECHNICAL - ASSOCIATED SPACE STATION

# 7. A. GEOSTATIONARY SATELLITE ORBIT (GSO)

Item	Data Name	Description(s)
7.A.1	Name of Associated Space Station:	Indicate the name of the associated space station with which communication is to be established;
7.A.2	Operational Satellite Network: (ITU filing name):	The name of the satellite that is operating according to ITU filing name;
7.A.3	ITU (BRIFC) Special Section Reference Number:	The reference and the number of the Special Section of the Weekly Circular in which any other request for coordination was published (BRIFC). This information can be obtained from the Space Satellite provider;
7.A.4	Orbital Position:	The nominal longitude of the orbital position of the satellite expressed in decimal degrees E(°E) or W(°W) ( the values should not exceed 180°);

7.A.5	Beam Designation:	The beam designation of associated space station;
7.A.6	Transmit Gain:	The gain of the transmitted power of satellite in dB;
7.A.7	Power Flux Density:	The appropriate sign (+ or -) followed by the value of the power density per square meter (dBW/m²).

# 7. B. NON-GEOSTATIONARY SATELLITE ORBIT (NGSO)

Item	Data Name	Description(s)
7.B.1	Name of Associated Space Station:	Indicate the name of the Associated Space Station with which communication is to be established;
7.B.2	Operational Satellite Network: (ITU filing name):	The name of the satellite that is operating according to ITU filing name;
7.B.3	ITU(BRIFC) Special Section Reference Number:	The reference and the number of the Special Section of the Weekly Circular in which any other request for coordination was published (BRIFC). This information can be obtained from the Space Satellite provider;
7.B.4	Inclination Angle:	The equatorial plane of the earth(°);
7.B.5	Apogee:	The relevant altitude of the apogee in kilometers (km) above a specified reference surface serving to represent the surface of the Earth or of the reference celestial body;
7.B.6	Perigee:	The relevant altitude of the perigee, expressed in kilometers (km) above a specified reference surface serving to represent the surface of the Earth or of the reference celestial body;
7.B.7	Beam Designation:	The beam designation of associated space station;
7.B.8	Transmit Gain:	The gain of the transmitted power of satellite in dB;
7.B.9	Power Flux Density:	The appropriate sign (+ or -) followed by the value of the power density per square meter (dBW/ $m^2$ ).

# **8. COMMENTS/ REMARKS**

Please provide details of your existing license/assignment under the Communications and Multimedia Act 1998. Please enter any comments or remarks that may assist MCMC in processing the application in an efficient manner. If required, please provide attachment.

Fixed Service: Earth Station Form 10/11

# 9. CERTIFICATION AND SIGNATURE

Please **READ CAREFULLY** the certification, sign and data the form where indicated. The name and I.C number of the signatory should be PRINTED clearly where indicated, and the business or company stamp should be placed under the bottom of the page.

References: Refer to Radio Regulations of the ITU, provision of the Communications and Multimedia (Spectrum) Regulations 2000 and its Amendment 2001.