

## COMMUNICATIONS AND MULTIMEDIA ACT 1998

### NOTIFICATION OF ISSUANCE OF CLASS ASSIGNMENTS

IN exercise of the powers conferred by section 169 of the Communications and Multimedia Act 1998 [Act 588], the Commission issues class assignments which confers rights on any person to use the frequency bands for the following devices:

- (a) cellular mobile access device as specified in the First Schedule;
- (b) short range communications device as specified in the Second Schedule;
- (c) leased channel radio access device as specified in the Third Schedule;
- (d) trunked radio access device as specified in the Fourth Schedule;
- (e) personal radio service device as specified in the Fifth Schedule;
- (f) cordless telephone device as specified in the Sixth Schedule;
- (g) two-way radio pager access device as specified in the Seventh Schedule;
- (h) fixed wireless access device as specified in the Eighth Schedule;
- (i) radio telemetry access device as specified in the Ninth Schedule;
- (j) very small aperture terminal as specified in the Tenth Schedule;

- (k) infra red device as specified in the Eleventh Schedule;
- (l) remote controlled device as specified in the Twelfth Schedule;
- (m) security device as specified in the Thirteenth Schedule;
- (n) wireless microphone device as specified in the Fourteenth Schedule;
- (o) free space optics device as specified in the Fifteenth Schedule;  
and
- (p) industrial, scientific and medical device as specified in the Sixteenth Schedule.

### **Commencement**

1. (1) Subject to subparagraph (2), the issuance of class assignments under this notification comes into operation on 1 November 2004.

(2) Item 2(b) and Table C of the Fifth Schedule comes into operation one year after the commencement of this notification.

### **Interpretation**

2. (1) In this notification, unless the context otherwise requires-

“designated frequency bands” means the frequency bands which are specified in paragraph 2 of each of the schedules in this notification;

“International Convention for the Safety of Life at Sea” means the International Convention for the Safety of Life at Sea concluded in London in 1974 concerning the safety of life at sea, and includes any subsequent convention, to which the Government is a party; and if any amendment to the Convention comes into operation with respect to Malaysia, references in this

notification shall, unless the context otherwise requires, be construed as references to the Convention as amended;

“International Telecommunication Convention” means the Constitution and Convention of the International Telecommunication Union signed in Geneva in 1992 relating to telecommunications, and includes any subsequent Constitution and Convention, to which the Government is a party, and it extends to any radiocommunications regulations made under the Constitution and the Convention; and if any amendment to the Constitution and the Convention comes into operation with respect to Malaysia, references in this notification shall, unless the context otherwise requires, be construed as references to the Constitution and the Convention as amended.

(2) Any term used in this notification shall, unless the context otherwise requires, have the same meaning as in the Act or subsidiary legislation made under the Act.

### **No protection**

3. The devices under the class assignments shall not be afforded protection from any interference.

### **Conditions**

4. (1) The following conditions shall apply to all class assignments that confers rights on any person to use the frequency bands for the devices as specified in each of the schedules in this notification:

- (a) a person subject to a class assignment shall take all necessary steps to ensure that no major interference or harmful interference is caused;
- (b) a person subject to a class assignment shall take all necessary steps to eliminate any minor interference, major interference or harmful interference, if such interference occurs;

- (c) a person subject to a class assignment shall ensure that devices causing major interference or harmful interference cease operation until such time as the major interference or harmful interference has been eliminated;
- (d) a person subject to a class assignment shall ensure that no devices used or operated in that frequency band shall exceed the specified output powers, emission parameters or coverage area as approved for the class assignment without the prior written approval of the Commission;
- (e) a person subject to a class assignment shall ensure that the devices, its operation and arrangement comply with the requirements, specifications, standards, plans and procedures decided by the Commission;
- (f) a person subject to a class assignment shall comply with the International Telecommunication Convention and the International Convention for the Safety of Life at Sea;
- (g) a person subject to a class assignment shall ensure that the devices comply with the Act and subsidiary legislation made under the Act and any mandatory standards registered by the Commission; and
- (h) a person subject to a class assignment shall ensure that only devices certified by the Commission under the Act shall be used or operated in the frequency band specified in the class assignments, and the devices shall bear a label "KELAS" as approved by the Commission.

(2) The conditions in subparagraph (1) are subject to any revision, amendment or revocation by the Commission.

## FIRST SCHEDULE

### **Class Assignment for Cellular Mobile Access Device**

#### 1. Definition

(1) In this class assignment, “cellular mobile access device” means a device communicating with a cellular radio base station provided by a licensee in the designated frequency bands.

(2) Subject to subparagraph (1), all terminology of an absolute technical nature shall have the same meaning as in the International Telecommunication Convention.

#### 2. Frequency bands

A cellular mobile access device shall only utilize the same spectrum that was assigned by way of an apparatus assignment for the purpose of receiving and transmitting within the spectrum and such utilization of the spectrum, amongst other uses, is on a shared non-exclusive basis.

#### 3. Class assignment

This class assignment confers rights on any person to operate a cellular mobile access device to communicate only with a cellular radio base station subject to the operation of the cellular radio base station being authorized by an apparatus assignment.

## SECOND SCHEDULE

### **Class Assignment for Short Range Communications Device**

1. Definition

- (1) In this class assignment, “short range communications device” means a low power communications device that provides communications over short distances for mobile and fixed applications in the designated frequency bands.
- (2) Subject to subparagraph (1), all terminology of an absolute technical nature shall have the same meaning as in the International Telecommunication Convention.

2. Frequency bands

A short range communications device shall only utilize any of the frequency bands as specified in the second column of Table A that is assigned for this class assignment, amongst other uses, on a shared non-exclusive basis.

3. Class assignment

This class assignment confers rights on any person to operate a short range communications device subject to-

- (a) the conditions as specified in paragraph 4; and
- (b) the device operating within the frequency bands as specified in paragraph 2.

4. Conditions

*Effective Isotropic Radiated Power (EIRP)*

The maximum EIRP shall not exceed the values as specified in the third column of Table A.

**TABLE A**  
**Frequency Bands and Maximum EIRP**

<i>Item</i>	<i>Frequency Bands</i>	<i>Maximum EIRP</i>
1.	6765.0000 kHz to 6795.0000 kHz	100 milliWatts
2.	13553.0000 kHz to 13567.0000 kHz	100 milliWatts
3.	26.9570 MHz to 27.2830 MHz	100 milliWatts
4.	40.6600 MHz to 40.7000 MHz	100 milliWatts
5	433.0000 MHz to 435.0000 MHz	100 milliWatts
6.	2400.0000 MHz to 2500.0000 MHz	500 milliWatts
7.	5250.0000 MHz to 5350.0000 MHz	1 Watt
8.	5725.0000 MHz to 5875.0000 MHz	1 Watt
9.	24.0000 GHz to 24.2500 GHz	1 Watt
10.	61.0000 GHz to 61.5000 GHz	1 Watt

11.	122.0000 GHz to 123.0000 GHz	1 Watt
12.	244.0000 GHz to 246.0000 GHz	1 Watt

THIRD SCHEDULE

**Class Assignment for  
Leased Channel Radio Access Device**

1. Definition

- (1) In this class assignment, “leased channel radio access device” means a device communicating with a leased channel radio base station provided by a licensee linking a single radio frequency channel to a person or group of persons in the designated frequency bands.
- (2) Subject to subparagraph (1), all terminology of an absolute technical nature shall have the same meaning as in the International Telecommunication Convention.

2. Frequency bands

A leased channel radio access device shall only utilize any of the following frequency bands assigned for this class assignment, amongst other uses, on a shared non-exclusive basis:

- (a) 138.0000 MHz to 139.4000 MHz/142.6000 MHz to 144.0000 MHz; or
- (b) 443.0125 MHz to 443.9875 MHz/448.0125 MHz to 448.9875 MHz.



3. Class assignment

This class assignment confers rights on any person to operate a leased channel radio access device to communicate only with a leased channel radio base station subject to-

- (a) the conditions as specified in paragraph 4;
- (b) the device operating within the frequency bands as specified in paragraph 2; and
- (c) the operation of the leased channel radio base station being authorized by an apparatus assignment.

4. Conditions

*Maximum power*

The maximum power shall not exceed 5 Watts.

FOURTH SCHEDULE

**Class Assignment for  
Trunked Radio Access Device**

1. Definition

- (1) In this class assignment, “trunked radio access device” means a device communicating with a trunked radio base station provided by a licensee in which the communications traffic may pass through any of the channels automatically assigned by the trunked radio system from a trunked group of channels served

by a trunked radio base station in the designated frequency bands.

- (2) Subject to subparagraph (1), all terminology of an absolute technical nature shall have the same meaning as in the International Telecommunication Convention.

## 2. Frequency bands

A trunked radio access device shall only utilize the same spectrum that was assigned by way of an apparatus assignment for the purpose of receiving and transmitting within the spectrum and such utilization of the spectrum, amongst other uses, is on a shared non-exclusive basis.

## 3. Class assignment

This class assignment confers rights on any person to operate a trunked radio access device to communicate only with a trunked radio base station subject to-

- (a) the conditions as specified in paragraph 4; and
- (b) the operation of the trunked radio base station being authorized by an apparatus assignment.

## 4. Conditions

### *Effective Isotropic Radiated Power (EIRP)*

The maximum EIRP shall not exceed 25 Watts.

## FIFTH SCHEDULE

### **Class Assignment for Personal Radio Service Device**

#### 1. Definition

- (1) In this class assignment, “personal radio service device” means a two-way radiocommunications device operating in the designated frequency bands.
- (2) Subject to subparagraph (1), all terminology of an absolute technical nature shall have the same meaning as in the International Telecommunication Convention.

#### 2. Frequency bands

A personal radio service device shall only utilize any of the following frequency bands assigned for this class assignment, amongst other uses, on a shared non-exclusive basis:

- (a) 26.9650 MHz to 27.4050 MHz;
- (b) 477.0125 MHz to 477.4875 MHz; or
- (c) 477.5250 MHz to 477.9875 MHz.

#### 3. Class assignment

This class assignment confers rights on any person to operate a personal radio service device subject to-

- (a) the conditions as specified in paragraph 4; and

(b) the device operating within the frequency bands as specified in the second column of Tables B, C and D.

4. Conditions

(1) *Channel plan*

The channel plan as specified in Tables B, C and D shall be complied with.

(2) *Modulation type and channel spacing*

(a) The modulation type shall be as specified in the third column of Tables B, C and D; and

(b) The channel spacing shall be as specified in—

(i) the first and second subcolumns of the fifth column of Table B; and

(ii) the fifth column of Tables C and D.

(3) *Reserved channels*

The channels as specified in the sixth column of Tables B, C and D shall be reserved for emergency and calling use.

(4) *Encryption device*

No encryption devices are to be employed on any of the channels as specified in Tables B, C and D .

(5) *Maximum transmission period*

(a) Transmission for voice shall not exceed 180 seconds in

duration for each transmission.

(b) Transmission, other than voice, shall not exceed 3 seconds in duration for each transmission.

(6) *Call signs*

No call signs are to be utilized other than in a field of operation where such call signs are required.

(7) *Telephone interconnect*

No connection of a personal radio service device to a telephony service is authorized.

(8) *Operation restrictions*

No person shall operate a personal radio service device—

(a) in such a way that would cause unnecessary alarm or serious affront to another person; or

(b) to harass or denigrate another person.

(9) *Commandeer*

A personal radio service device may be commandeered to assist in the case of—

(a) emergency;

(b) national interest; or

(c) danger to person or property.

(10) *Effective Isotropic Radiated Power (EIRP)*

The maximum EIRP shall not exceed the values as specified in—

(a) the first and second subcolumns of the fourth column of Table B; and

(b) the fourth column in Tables C and D.

TABLE B

**27MHz Citizen Band - PRS Frequencies**

(A medium-range simplex radiocommunications service for commercial and recreational use)

Channel	Frequency (MHz)	Modulation Type	Peak power (Watts) (Maximum EIRP)		Channel Spacing (kHz)		Reserved Channel
			Double Side Band: AM/FM	Single Side Band: AM	Double Side Band: AM/FM	Single Side Band: AM	
1	26.9650	AM / FM	4	12	6	3	
2	26.9750	AM / FM	4	12	6	3	
3	26.9850	AM / FM	4	12	6	3	
4	27.0050	AM / FM	4	12	6	3	
5	27.0150	AM / FM	4	12	6	3	
6	27.0250	AM / FM	4	12	6	3	
7	27.0350	AM / FM	4	12	6	3	
8	27.0550	AM / FM	4	12	6	3	
9	27.0650	AM / FM	4	12	6	3	Emergency
10	27.0750	AM / FM	4	12	6	3	

11	27.0850	AM / FM	4	12	6	3	Calling
12	27.1050	AM / FM	4	12	6	3	
13	27.1150	AM / FM	4	12	6	3	
14	27.1250	AM / FM	4	12	6	3	
15	27.1350	AM / FM	4	12	6	3	
16	27.1550	AM / FM	4	12	6	3	
17	27.1650	AM / FM	4	12	6	3	
18	27.1750	AM / FM	4	12	6	3	
19	27.1850	AM / FM	4	12	6	3	
20	27.2050	AM / FM	4	12	6	3	
21	27.2150	AM / FM	4	12	6	3	
22	27.2250	AM / FM	4	12	6	3	
23	27.2350	AM / FM	4	12	6	3	
24	27.2450	AM / FM	4	12	6	3	
25	27.2550	AM / FM	4	12	6	3	
26	27.2650	AM / FM	4	12	6	3	
27	27.2750	AM / FM	4	12	6	3	
28	27.2850	AM / FM	4	12	6	3	
29	27.2950	AM / FM	4	12	6	3	
30	27.3050	AM / FM	4	12	6	3	
31	27.3150	AM / FM	4	12	6	3	
32	27.3250	AM / FM	4	12	6	3	
33	27.3350	AM / FM	4	12	6	3	
34	27.3450	AM / FM	4	12	6	3	
35	27.3550	AM / FM	4	12	6	3	
36	27.3650	AM / FM	4	12	6	3	
37	27.3750	AM / FM	4	12	6	3	
38	27.3850	AM / FM	4	12	6	3	
39	27.3950	AM / FM	4	12	6	3	
40	27.4050	AM / FM	4	12	6	3	

TABLE C

**477MHz Citizen Band - PRS Frequencies**

(A short-range simplex radiocommunications service for business and commercial use)

<i>Channel</i>	<i>Frequency (MHz)</i>	<i>Modulation Type</i>	<i>Peak power (Watts)  (Maximum EIRP)</i>	<i>Channel Spacing (kHz)</i>	<i>Reserved Channel</i>
1	477.0125	FM / PM	5	12.5	
2	477.0250	FM / PM	5	12.5	
3	477.0375	FM / PM	5	12.5	
4	477.0500	FM / PM	5	12.5	
5	477.0625	FM / PM	5	12.5	
6	477.0750	FM / PM	5	12.5	
7	477.0875	FM / PM	5	12.5	
8	477.1000	FM / PM	5	12.5	
9	477.1125	FM / PM	5	12.5	Emergency
10	477.1250	FM / PM	5	12.5	
11	477.1375	FM / PM	5	12.5	Calling
12	477.1500	FM / PM	5	12.5	
13	477.1625	FM / PM	5	12.5	
14	477.1750	FM / PM	5	12.5	
15	477.1875	FM / PM	5	12.5	
16	477.2000	FM / PM	5	12.5	
17	477.2125	FM / PM	5	12.5	
18	477.2250	FM / PM	5	12.5	
19	477.2375	FM / PM	5	12.5	
20	477.2500	FM / PM	5	12.5	
21	477.2625	FM / PM	5	12.5	



22	477.2750	FM / PM	5	12.5	
23	477.2875	FM / PM	5	12.5	
24	477.3000	FM / PM	5	12.5	
25	477.3125	FM / PM	5	12.5	
26	477.3250	FM / PM	5	12.5	
27	477.3375	FM / PM	5	12.5	
28	477.3500	FM / PM	5	12.5	
29	477.3625	FM / PM	5	12.5	
30	477.3750	FM / PM	5	12.5	
31	477.3875	FM / PM	5	12.5	
32	477.4000	FM / PM	5	12.5	
33	477.4125	FM / PM	5	12.5	
34	477.4250	FM / PM	5	12.5	
35	477.4375	FM / PM	5	12.5	
36	477.4500	FM / PM	5	12.5	
37	477.4625	FM / PM	5	12.5	
38	477.4750	FM / PM	5	12.5	
39	477.4875	FM / PM	5	12.5	

TABLE D

**477MHz Family Band - PRS Frequencies**

(A very short-range simplex radiocommunications service for recreational use)

<i>Channel</i>	<i>Frequency (MHz)</i>	<i>Modulation Type</i>	<i>Peak power (Watt)  (Maximum EIRP)</i>	<i>Channel Spacing (kHz)</i>	<i>Reserved Channel</i>
1	477.5250	FM / PM	0.5	12.5	
2	477.5375	FM / PM	0.5	12.5	

3	477.5500	FM / PM	0.5	12.5	
4	477.5625	FM / PM	0.5	12.5	
5	477.5750	FM / PM	0.5	12.5	
6	477.5875	FM / PM	0.5	12.5	
7	477.6000	FM / PM	0.5	12.5	
8	477.6125	FM / PM	0.5	12.5	
9	477.6250	FM / PM	0.5	12.5	Emergency
10	477.6375	FM / PM	0.5	12.5	
11	477.6500	FM / PM	0.5	12.5	Calling
12	477.6625	FM / PM	0.5	12.5	
13	477.6750	FM / PM	0.5	12.5	
14	477.6875	FM / PM	0.5	12.5	
15	477.7000	FM / PM	0.5	12.5	
16	477.7125	FM / PM	0.5	12.5	
17	477.7250	FM / PM	0.5	12.5	
18	477.7375	FM / PM	0.5	12.5	
19	477.7500	FM / PM	0.5	12.5	
20	477.7625	FM / PM	0.5	12.5	
21	477.7750	FM / PM	0.5	12.5	
22	477.7875	FM / PM	0.5	12.5	
23	477.8000	FM / PM	0.5	12.5	
24	477.8125	FM / PM	0.5	12.5	
25	477.8250	FM / PM	0.5	12.5	
26	477.8375	FM / PM	0.5	12.5	
27	477.8500	FM / PM	0.5	12.5	
28	477.8625	FM / PM	0.5	12.5	
29	477.8750	FM / PM	0.5	12.5	
30	477.8875	FM / PM	0.5	12.5	
31	477.9000	FM / PM	0.5	12.5	
32	477.9125	FM / PM	0.5	12.5	
33	477.9250	FM / PM	0.5	12.5	

34	477.9375	FM / PM	0.5	12.5	
35	477.9500	FM / PM	0.5	12.5	
36	477.9625	FM / PM	0.5	12.5	
37	477.9750	FM / PM	0.5	12.5	
38	477.9875	FM / PM	0.5	12.5	

## SIXTH SCHEDULE

### **Class Assignment for Cordless Telephone Device**

#### 1. Definition

- (1) In this class assignment, “cordless telephone device” means a two-way low power mobile or portable device which communicates with a local base station in the designated frequency bands and is directly connected to a licensee.
- (2) Subject to subparagraph (1), all terminology of an absolute technical nature shall have the same meaning as in the International Telecommunication Convention.

#### 2. Frequency bands

A cordless telephone device shall only utilize any of the frequency bands as specified in the second column of Table E that is assigned for this class assignment, amongst other uses, on a shared non-exclusive basis.

#### 3. Class assignment

This class assignment confers rights on any person to operate a

cordless telephone device subject to-

- (a) the conditions as specified in paragraph 4; and
- (b) the device operating within the frequency bands as specified in paragraph 2.

4. Conditions

*Effective Isotropic Radiated Power (EIRP)*

The maximum EIRP shall not exceed the values as specified in the third column of Table E.

**TABLE E**  
**Frequency Bands and Maximum EIRP**

<i>Item</i>	<i>Frequency Bands</i>	<i>Maximum EIRP</i>
1.	46.6100 MHz to 46.9700 MHz	50 milliWatts
2.	49.6100 MHz to 49.9700 MHz	50 milliWatts
3.	1880.0000 MHz to 1900.0000 MHz	100 milliWatts
4.	2400.0000 MHz to 2483.5000 MHz	100 milliWatts

## SEVENTH SCHEDULE

### **Class Assignment for Two-Way Radio Pager Access Device**

#### 1. Definition

- (1) In this class assignment, “two-way radio pager access device” means a two-way radiocommunications device communicating with a paging base station provided by a licensee for receiving or sending a tone, voice, numeric or alphanumeric message in the designated frequency bands.
- (2) Subject to subparagraph (1), all terminology of an absolute technical nature shall have the same meaning as in the International Telecommunication Convention.

#### 2. Frequency bands

A two-way radio pager access device shall only utilize the following frequency band assigned for this class assignment, amongst other uses, on a shared non-exclusive basis:

279.0000 MHz to 281.0000 MHz/919.0000 MHz to 923.0000 MHz.

#### 3. Class assignment

This class assignment confers rights on any person to operate a two-way radio pager access device to communicate only with a paging base station subject to-

- (a) the conditions as specified in paragraph 4;
- (b) the device operating within the frequency bands as specified in paragraph 2; and
- (c) the operation of the paging base station being authorized by an apparatus assignment.

4. Conditions

*Effective Isotropic Radiated Power (EIRP)*

The maximum EIRP shall not exceed 1 Watt.

EIGHTH SCHEDULE

**Class Assignment for  
Fixed Wireless Access Device**

1. Definition

- (1) In this class assignment, “fixed wireless access device” means a fixed or portable two-way radiocommunications device communicating with a fixed station provided by a licensee in the designated frequency bands.
- (2) Subject to subparagraph (1), all terminology of an absolute technical nature shall have the same meaning as in the International Telecommunication Convention.

## 2. Frequency bands

A fixed wireless access device shall only utilize any of the following frequency bands assigned for this class assignment, amongst other uses, on a shared non-exclusive basis:

- (a) 415.0125 MHz to 420.0000 MHz;
- (b) 876.3100 MHz to 879.3300 MHz/831.3100 MHz to 834.3300 MHz;
- (c) 1900.0000 MHz to 1920.0000 MHz;
- (d) 2504.0000 MHz to 2688.0000 MHz;
- (e) 3.4000 GHz to 3.7000 GHz;
- (f) 10.0000 GHz to 10.7000 GHz;
- (g) 24.2500 GHz to 27.0000 GHz;
- (h) 27.0000 GHz to 29.0000 GHz; or
- (i) 31.0000 GHz to 31.3000 GHz.

## 3. Class assignment

This class assignment confers rights on any person to operate a fixed wireless access device to communicate only with a fixed station subject to-

- (a) the conditions as specified in paragraph 4;

- (b) the device operating within the frequency bands as specified in paragraph 2; and
- (c) the operation of the fixed station being authorized by an apparatus assignment.

4. Conditions

*Effective Isotropic Radiated Power (EIRP)*

The maximum EIRP shall not exceed 5 Watts.

NINTH SCHEDULE

**Class Assignment for  
Radio Telemetry Access Device**

1. Definition

- (1) In this class assignment, “radio telemetry access device” means a one or two-way radiocommunications device communicating with a fixed station provided by a licensee for automatic or on request reporting of measurements or records through radio connectivity served by a fixed station in the designated frequency bands.
- (2) Subject to subparagraph (1), all terminology of an absolute technical nature shall have the same meaning as in the International Telecommunication Convention.

2. Frequency bands

A radio telemetry access device shall only utilize any of the frequency



bands as specified in the second column of Table F that is assigned for this class assignment, amongst other uses, on a shared non-exclusive basis.

3. Class assignment

This class assignment confers rights on any person to operate a radio telemetry access device to communicate only with a fixed station subject to-

- (a) the conditions as specified in paragraph 4;
- (b) the device operating within the frequency bands as specified in paragraph 2; and
- (c) the operation of the fixed station being authorized by an apparatus assignment.

4. Conditions

(1) *Effective Isotropic Radiated Power (EIRP)*

The maximum EIRP shall not exceed the values as specified in the third column of Table F.

(2) *Operation restriction*

A person shall not operate a radio telemetry access device contrary to the Act, or in such a way that endangers people, animals or equipment.

TABLE F

### Frequency Bands and Maximum EIRP

<i>Item</i>	<i>Frequency Bands</i>	<i>Maximum EIRP</i>
1.	162.9750 MHz to 163.1500 MHz	1 Watt
2.	450.0125 MHz to 451.9750 MHz	5 Watts
3.	460.0125 MHz to 461.9750 MHz	5 Watts

### TENTH SCHEDULE

#### **Class Assignment for Very Small Aperture Terminal**

1. Definition

(1) In this class assignment, “very small aperture terminal (VSAT)” means an earth station having a dish antenna with a diameter not exceeding 2.4 metres and a digital transmission bit rate not exceeding 2 Mega bits per second communicating with a satellite provided by a licensee in the designated frequency bands.

(2) Subject to subparagraph (1), all terminology of an absolute technical nature shall have the same meaning as in the International Telecommunication Convention.

2. Frequency bands

A VSAT shall only utilize the following frequency bands assigned for this class assignment, amongst other uses, on a shared non-exclusive basis:

- (a) 3820.0000 MHz to 4120.0000 MHz (downlink); and
- (b) 6045.0000 MHz to 6345.0000 MHz (uplink).

3. Class assignment

This class assignment confers rights on any person to operate a VSAT subject to-

- (a) the conditions as specified in paragraph 4;
- (b) the VSAT operating within the frequency bands as specified in the first and second columns of Table G;
- (c) the VSAT being connected to a network service provided through a space station named Malaysia East Asia Satellite 1 (MEASAT 1); and
- (d) either-
  - (i) the VSAT being used by the end user for connecting with a licensed network service provider for use with other licensed network services or applications services;
  - (ii) the VSAT being connected with a licensed network service provider for use as a private network facility; or
  - (iii) the VSAT being used for connecting with a licensed network service provider for telemetry applications.

4. Conditions

(1) *Channel plan*

The channel plan as specified in Table G shall be complied with.

(2) *Effective Isotropic Radiated Power (EIRP)*

The maximum level of angle off-axis EIRP density from a VSAT shall not exceed the values as specified in the second column of Table H.

TABLE G  
**Frequencies**

<i>Channel</i>	<i>Uplink Frequency (MHz)</i>	<i>Downlink Frequency (MHz)</i>
1	6045.0000	3820.0000
2	6145.0000	3920.0000
3	6185.0000	3960.0000
4	6225.0000	4000.0000
5	6305.0000	4080.0000
6	6345.0000	4120.0000

TABLE H  
Maximum EIRP

<b>6 GHz Operation</b>	
<b><u>Angle off-axis</u></b>	<b><u>Maximum EIRP density per 4 kHz</u></b>
$2.5^\circ \leq \varphi \leq 7^\circ$	$(32 - 25 \log \varphi)$ dB (W/4kHz)
$7^\circ < \varphi \leq 9.2^\circ$	11 dB (W/4 kHz)
$9.2^\circ < \varphi \leq 48^\circ$	$(35 - 25 \log \varphi)$ dB (W/4 kHz)
$48^\circ < \varphi \leq 180^\circ$	-7 dB (W/4 kHz)

ELEVENTH SCHEDULE

**Class Assignment for Infra Red Device**

1. Definition

- (1) In this class assignment, “infra red device” means a radiocommunications device operating in the electromagnetic frequency range from 187.5000 THz to 420.0000 THz.
- (2) Subject to subparagraph (1), all terminology of an absolute technical nature shall have the same meaning as in the International Telecommunication Convention.

2. Frequency band

An infra red device shall only utilize the following frequency band assigned for this class assignment, amongst other uses, on a shared non-exclusive basis:

187.5000 THz to 420.0000 THz.

3. Class assignment

This class assignment confers rights on any person to operate an infra red device subject to-

- (a) the conditions as specified in paragraph 4; and
- (b) the device operating within the frequency band as specified in paragraph 2.

4. Conditions

(1) *Maximum power*

The maximum power shall not exceed 125 milliWatts.

(2) *Operation restriction*

A person shall not operate an infra red device contrary to the Act, or in such a way that endangers people, animals or equipment.

## TWELFTH SCHEDULE

### **Class Assignment for Remote Controlled Device**

1. Definition

- (1) In this class assignment, “remote controlled device” means a device which is occasionally used to remotely control, by method of low power radio emissions, consumer devices including, but not limited to, remote controlled doors, air conditioners, gates, locks, video equipment, cameras and toys.

(2) Subject to subparagraph (1), all terminology of an absolute technical nature shall have the same meaning as in the International Telecommunication Convention.

2. Frequency bands

A remote controlled device shall only utilize any of the following frequency bands assigned for this class assignment, amongst other uses, on a shared non-exclusive basis:

- (a) 26.9650 MHz to 27.2750 MHz;
- (b) 40.0000 MHz;
- (c) 47.0000 MHz;
- (d) 49.0000 MHz;
- (e) 303.0000 MHz to 320.0000 MHz; or
- (f) 433.0000 MHz to 435.0000 MHz.

3. Class assignment

This class assignment confers rights on any person to operate a remote controlled device subject to-

- (a) the conditions as specified in paragraph 4; and
- (b) the device operating within the frequency bands as specified in paragraph 2.

4. Conditions

*Effective Isotropic Radiated Power (EIRP)*

The maximum EIRP shall not exceed 50 milliWatts.

THIRTEENTH SCHEDULE

**Class Assignment for Security Device**

1. Definition

(1) In this class assignment, "security device" means a low power radio device specifically utilized for consumer security applications and used to remotely control, interrogate and download information, or detect objects.

(2) Subject to subparagraph (1), all terminology of an absolute technical nature shall have the same meaning as in the International Telecommunication Convention.

2. Frequency bands

A security device shall only utilize any of the following frequency bands assigned for this class assignment, amongst other uses, on a shared non-exclusive basis:

(a) 3.0000 kHz to 195.0000 kHz;

(b) 228.0063 MHz to 228.9937 MHz;

(c) 303.0000 MHz to 320.0000 MHz;



- (d) 400.0000 MHz to 402.0000 MHz;
- (e) 433.0000 MHz to 435.0000 MHz;
- (f) 868.1000 MHz; or
- (g) 76.0000 GHz to 77.0000 GHz.

3. Class assignment

This class assignment confers rights on any person to operate a security device subject to-

- (a) the conditions as specified in paragraph 4; and
- (b) the device operating within the frequency bands as specified in paragraph 2.

4. Conditions

*Effective Isotropic Radiated Power (EIRP)*

The maximum EIRP shall not exceed 50 milliWatts.

## FOURTEENTH SCHEDULE

### **Class Assignment for Wireless Microphone Device**

1. Definition

- (1) In this class assignment, “wireless microphone device” means a one-way low power system providing radio connectivity between

a microphone and an audio amplifier for the purposes of enabling the audio to be amplified.

- (2) Subject to subparagraph (1), all terminology of an absolute technical nature shall have the same meaning as in the International Telecommunication Convention.

## 2. Frequency bands

A wireless microphone device shall only utilize any of the following frequency bands assigned for this class assignment, amongst other uses, on a shared non-exclusive basis:

- (a) 26.95728 MHz to 27.28272 MHz;
- (b) 40.4350 MHz to 40.9250 MHz;
- (c) 87.5000 MHz to 108.0000 MHz;
- (d) 182.0250 MHz to 182.9750 MHz;
- (e) 183.0250 MHz to 183.4750 MHz;
- (f) 217.0250 MHz to 217.9750 MHz;
- (g) 218.0250 MHz to 218.4750 MHz; or
- (h) 510.0000 MHz to 798.0000 MHz.

## 3. Class assignment

This class assignment confers rights on any person to operate a wireless microphone device subject to-

- (a) the conditions as specified in paragraph 4; and
- (b) the device operating within the frequency bands as specified in paragraph 2.

4. Conditions

*Effective Isotropic Radiated Power (EIRP)*

The maximum EIRP shall not exceed 50 milliWatts.

FIFTEENTH SCHEDULE

**Class Assignment for Free Space Optics Device**

1. Definition

- (1) In this class assignment, “free space optics (FSO) device” means a device that uses line-of-sight optical technology to provide a point to point communication link.
- (2) Subject to subparagraph (1), all terminology of an absolute technical nature shall have the same meaning as in the International Telecommunication Convention.

2. Frequency bands

A FSO device shall only utilize any of the following frequencies assigned for this class assignment, amongst other uses, on a shared non-exclusive basis:

(a) 193.5484 THz (wavelength of 1550nm); or

(b) 352.9412 THz (wavelength of 850nm).

3. Class assignment

This class assignment confers rights on any person to operate a FSO device subject to-

(a) the conditions as specified in paragraph 4; and

(b) the device operating within the frequency bands as specified in paragraph 2.

4. Conditions

(1) *Maximum power*

The maximum power shall not exceed 650 milliWatts.

(2) *Operation restriction*

A person shall not operate a FSO device contrary to the Act, or in such a way that endangers people, animals or equipment.

## SIXTEENTH SCHEDULE

### **Class Assignment for Industrial, Scientific and Medical Device**

1. Definition

- (1) In this class assignment, “industrial, scientific and medical (ISM) device” means a low power radio device, which is used for industrial, scientific, medical, domestic or similar purposes.
- (2) Subject to subparagraph (1), all terminology of an absolute technical nature shall have the same meaning as in the International Telecommunication Convention.

## 2. Frequency bands

An ISM device shall only utilize any of the following frequency bands assigned for this class assignment, amongst other uses, on a shared non-exclusive basis:

- (a) 6765.0000 kHz to 6795.0000 kHz;
- (b) 13.5530 MHz to 13.5670 MHz;
- (c) 26.9570 MHz to 27.2830 MHz;
- (d) 40.6600 MHz to 40.7000 MHz;
- (e) 2400.0000 MHz to 2500.0000 MHz;
- (f) 5725.0000 MHz to 5875.0000 MHz;
- (g) 24.0000 GHz to 24.2500 GHz;
- (h) 61.0000 GHz to 61.5000 GHz;
- (i) 122.0000 GHz to 123.0000 GHz; or
- (j) 244.0000 GHz to 246.0000 GHz.

3. Class assignment

This class assignment confers rights on any person to operate an ISM device subject to-

- (a) the conditions as specified in paragraph 4; and
- (b) the device operating within the frequency bands as specified in paragraph 2.

4. Conditions

- (1) *Effective Isotropic Radiated Power (EIRP)*

The maximum EIRP shall not exceed 500 milliWatts.

- (2) *Operation restriction*

A person shall not operate an ISM device contrary to the Act, or in such a way that endangers people, animals or equipment.

**Revocation**

5. The Notification of Issuance of Class Assignments as published in P.U. (B) 109 on 1 April 2000 is revoked.

Dated *22 October 2004*

[KTKM(S)353/146/5 Klt. , PN(PU2) 601/VI]



DATO' V. DANAPALAN

*Chairman,*

*Malaysian Communications and Multimedia*

*Commission*