



# **MALAYSIAN SPECTRUM LICENSING FRAMEWORK**

Presented by:

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Acting Head

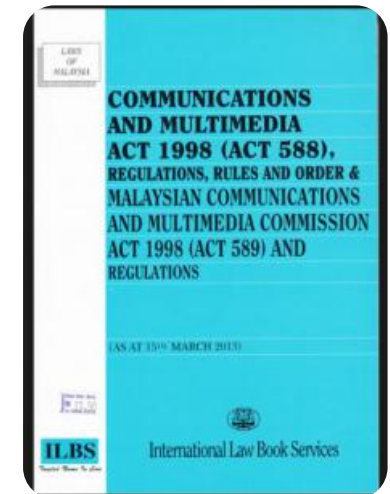
Licensing and Assignment Division

Malaysian Communications and Multimedia Commission (MCMC)

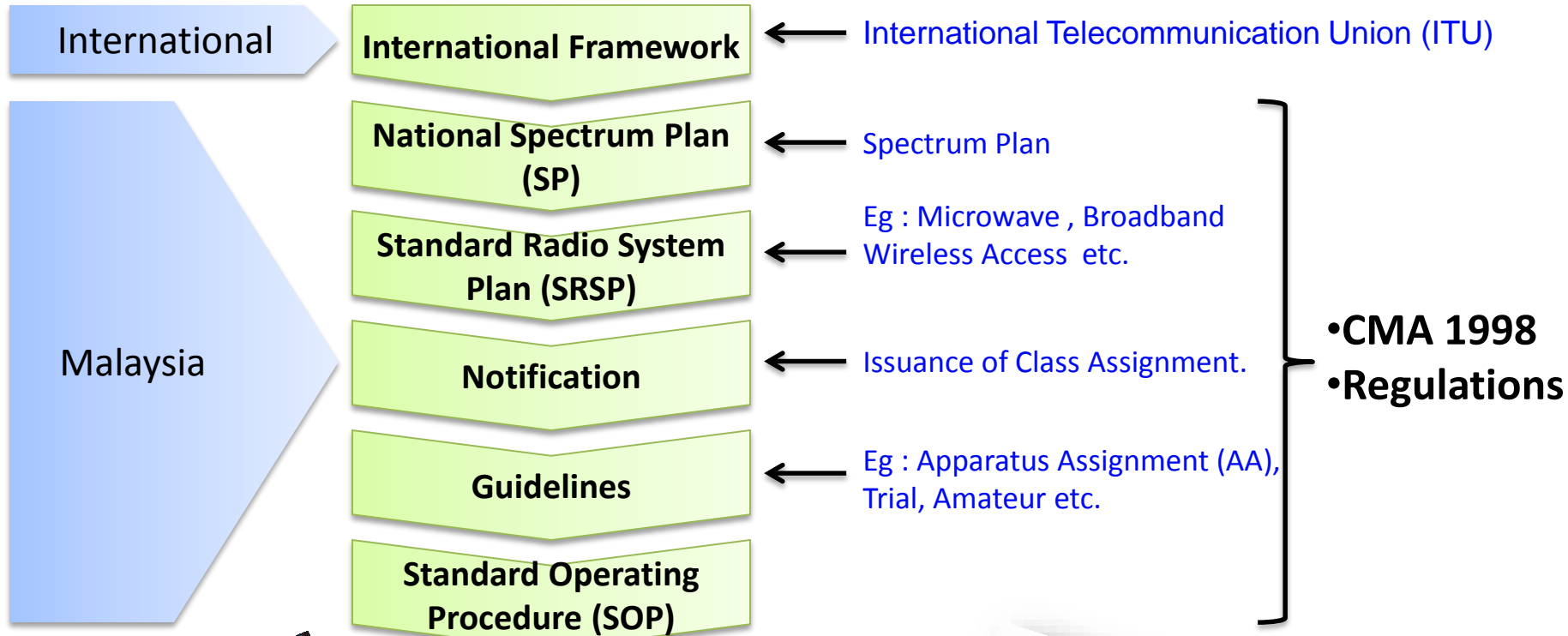
# BACKGROUND



- **Malaysian Communications and Multimedia Commission (MCMC)**
  - Established in 1998.
  - Body that regulates the communications and multimedia industries in Malaysia.
- The **Communications and Multimedia Act 1998 (CMA 1998)** is the main legislation that regulates the converging Communication and Multimedia industries.
- The powers, which have been given to the Commission enable it to carry out its tasks in accordance with CMA 1998.



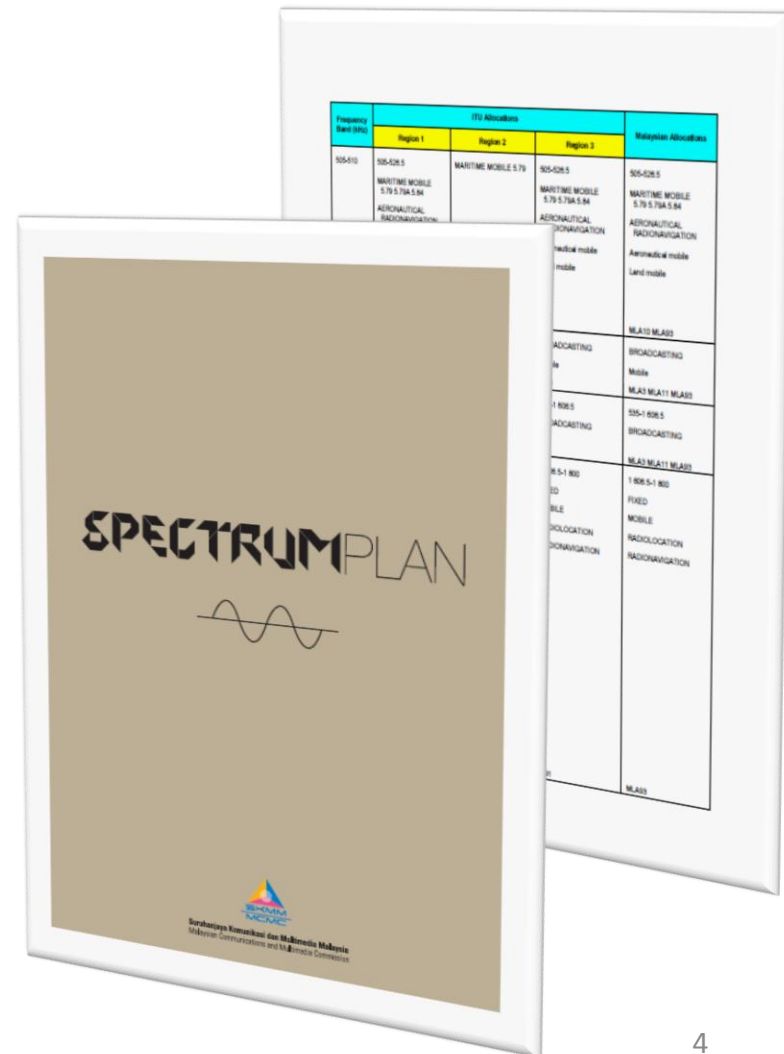
# Laws and Guideline



# National Spectrum Plan



- Spectrum Plan
  - Requirement under Section 172 of CMA 1998:
    - Commission may develop a spectrum plan.
    - Made available to the public.
  - Aligned with ITU requirements for Region 3.



# Standard Radio System Plan



Information on **requirements** to use specified frequency bands.

- **Specific frequency bands**
  - e.g. Frequency 2500 to 2600MHz
- **Technical characteristics**
  - e.g. Transmit power
- **Frequency channelling**
  - e.g. 5MHz per sub-block
- **International border coordination**
  - e.g. 50km from neighbouring countries
- **Principles of assignment**
  - e.g. Who can apply
  - e.g. Holder of Network Facilities Provider Individual (NFP(I)) license

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SKMM SRSP-523  
IMT  
28 November 2012

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Standard Radio System Plan

**REQUIREMENTS FOR INTERNATIONAL  
MOBILE TELECOMMUNICATIONS (IMT)  
SYSTEMS OPERATING IN THE FREQUENCY  
BAND 2500 MHz TO 2690 MHz**



Suruhanjaya Komunikasi dan Multimedia Malaysia  
Malaysian Communications and Multimedia Commission  
Off Pensiaran Multimedia,  
63000 Cyberjaya, Selangor Darul Ehsan, Malaysia  
Tel: +60 3 8688 8000 Fax: +60 3 8688 1005  
Website: <http://www.skmm.gov.my>

# Type of assignments for spectrum

## Spectrum Assignment (SA)

- Validity : up to maximum of 20 years
- Fee : Spectrum fee & Maintenance fee
- Through tender process
- SA certificate
- Subject to conditions



## Apparatus Assignment (AA)

- Validity : up to maximum of 5 years
- Fee : As specified in Spectrum Regulation 2000
- First come first serve basis
- AA Certificate
- Subject to conditions



## Class Assignment (CA)

- Through Notification
- No application required
- No fee to be paid
- Subject to conditions



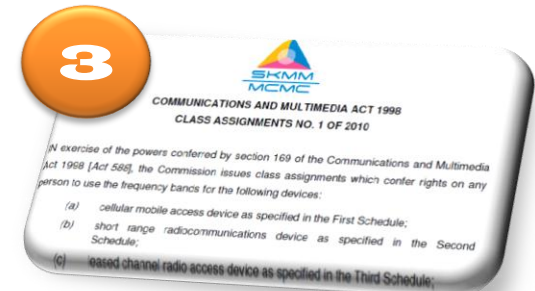
1



2



3

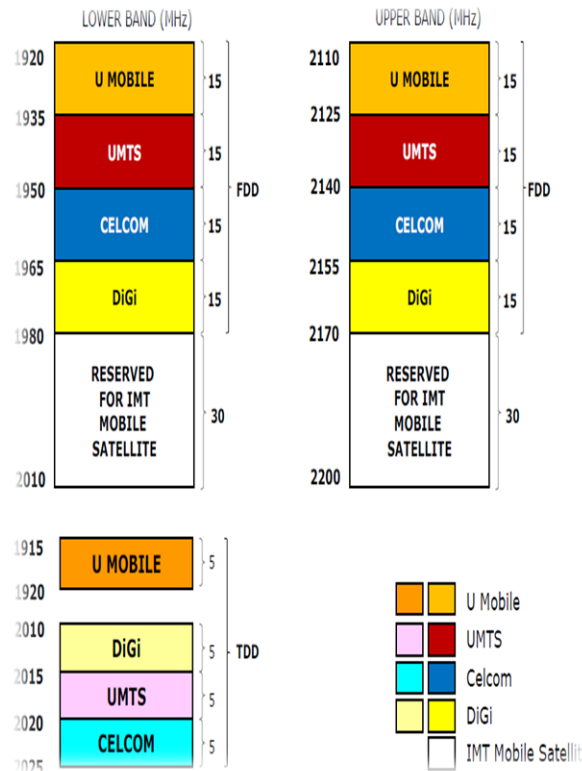


# Spectrum Assignment (SA)

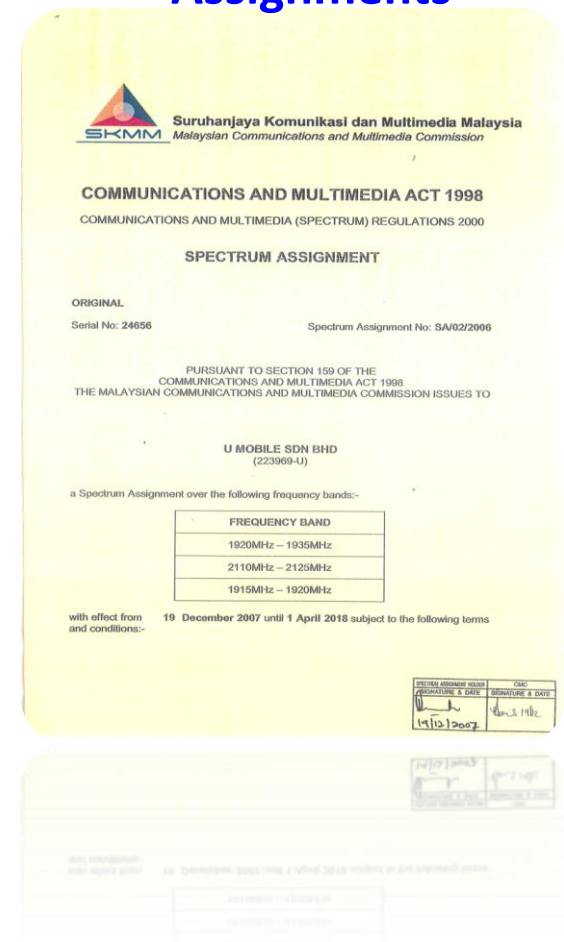


- ✓ Rights to use a specified band/s.
- ✓ Spectrum Assignments were issued either via tender/auction/ fixed price.
- ✓ For a period of up to 20 years or lesser.

## SA for 3G



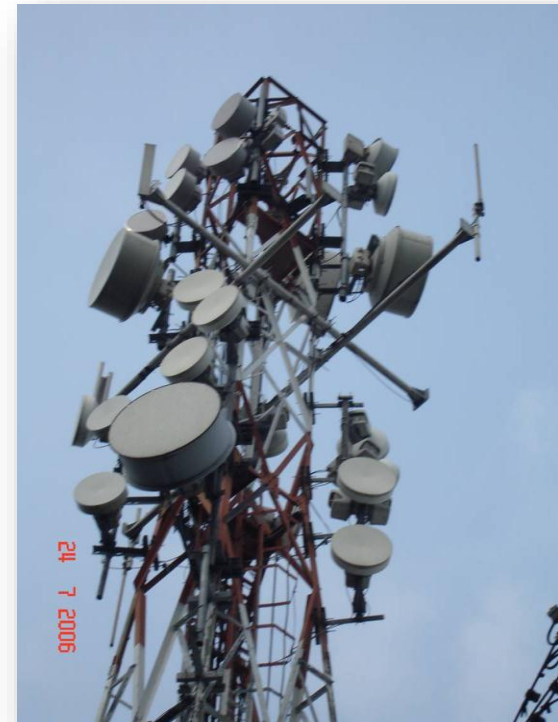
## Example of Spectrum Assignments



# Apparatus Assignment (AA)



- ✓ Rights to use a specified spectrum to operate a **specified kind of network facility.**
- ✓ Fixed price by application on first come first serve basis.
- ✓ Assignment period of up to 5 years or lesser.





## Why the need to apply for an AA ?

- Spectrum management is a central activity of Radio Authority.
- Efficient and effective Spectrum Management.
- Sharing the resources.
- To monitor the resources usage.
- Information for frequency interference solution and mitigation.
- Information for re-farming and future resource planning.
- Threat to safety due to incorrect use of frequencies.
- Compliance with technical standard requirements.



# Class Assignment (CA)



- ✓ Rights to use any frequency/band for a specified purpose.
- ✓ No fee and no registration to use.
- ✓ Subject to the conditions.
- ✓ Latest document available in MCMC website :
  - Class Assignment No.2 of 2015



## CLASS ASSIGNMENTS NO. 2 OF 2015

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 radiocommunications 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) 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;

### 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 class assignment:

- (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;

*Example of Class Assignment Document*

# International Border Coordination



- Use of frequency near the international border are subjected to international frequency coordination.
- Committees responsible for border coordination are:

**a) Frequency Assignment and Coordination Singapore, Malaysia, Armed Forces and Brunei (FACSMAB)**

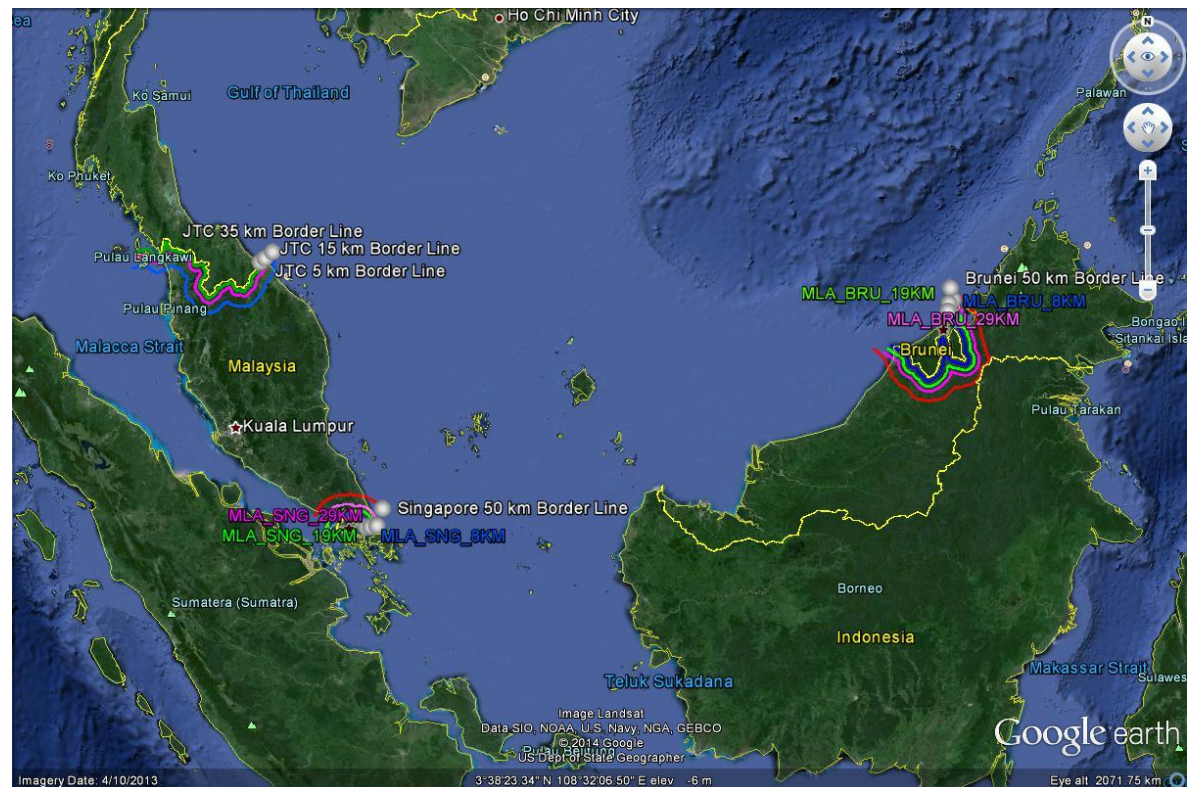
- Coordination between Malaysia, Singapore and Brunei

**b) Joint Technical Committee on Coordination and Assignments of Frequencies along Malaysia -Thailand Common Border (JTC)**

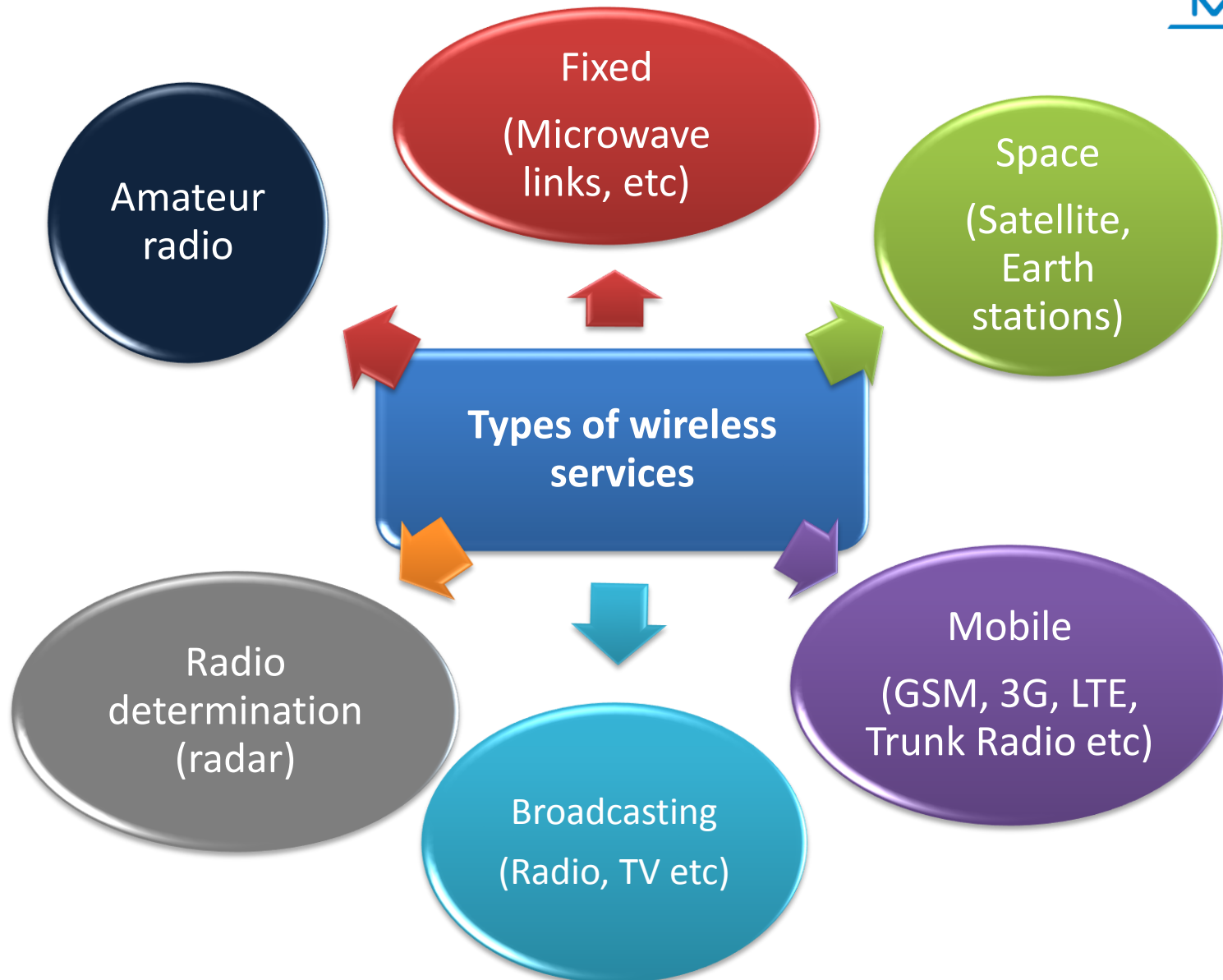
- Coordination between Malaysia and Thailand

**c) Joint Committee on Communications Malaysia – Indonesia (JCC)**

- Coordination between Malaysia and Indonesia

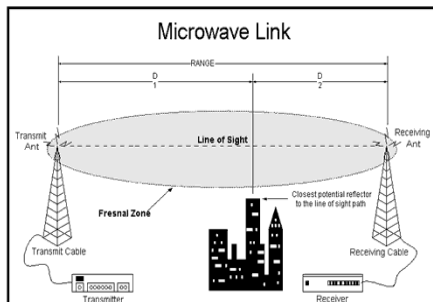


# Type of Services



## Fixed Service

- Radio communications service between specified fixed points.
- Example: line-of-sight radio relay systems (microwave), etc.



Earth station



## Space Service

- Radio communications service using a space station or any other stations located beyond, or intended to go beyond, or which has been beyond, the major portion of the Earth's atmosphere.
- Example: telecommunications satellite, broadcasting satellite etc.

Measat-3  
Measat-3a  
(91.5°E)

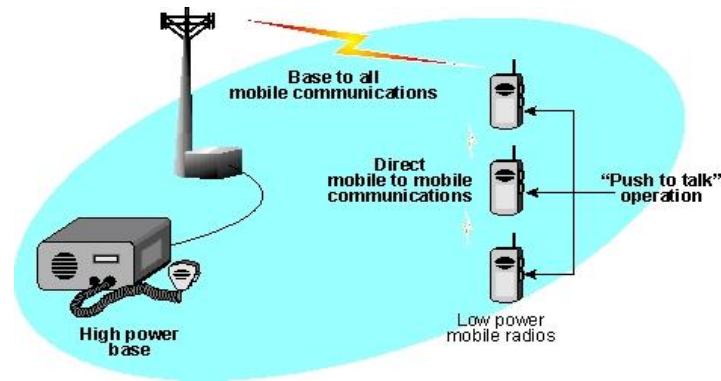


Africasat-1a  
(46°E)



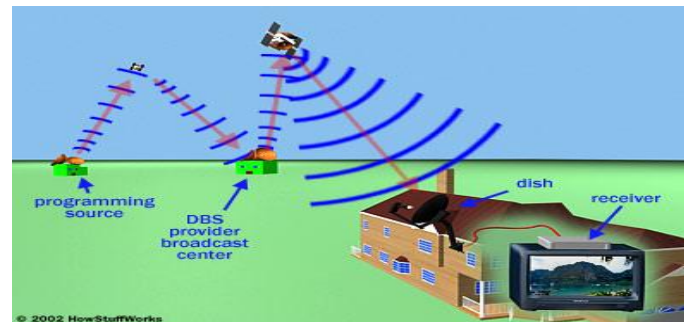
## Mobile Service

- Radio communications service between a mobile station and land station, or between mobile stations.
- Example: Private network walkie-talkie, cellular mobile service (3G, GSM, LTE), trunked radio service etc.



## Broadcasting Service

- Content applications service in which content is transmitted by means of radio communications and intended for direct reception by general public or a section of the general public.
- TV, Radio



## Radiodetermination Service

- Radio communications service for the purpose of obtaining position, velocity or other characteristics of an object, or information relating to these parameters.
- Example: radar, beacon systems etc.



## Amateur Radio Service

- Radio communications service in which a station is used for the purpose of self-training, intercommunication and technical investigations carried out by amateurs, that is, by duly authorized persons who are interested in radio technique solely with a personal aim and without any pecuniary interest.





***Thank You***



# Long Term Evolution

# ALLOCATION FOR LTE SERVICE IN MALAYSIA



SERVICE	OPERATORS
<b>LTE in 2600 MHz (2500 – 2690 MHz)</b>	REDtone Marketing Sdn Bhd
	Maxis Broadband Sdn Bhd
	U Mobile Sdn Bhd
	Celcom Axiata Berhad
	Altel Communications Sdn Bhd
	Digi Telecommunications Sdn Bhd
	Packet One Networks Sdn Bhd
	YTL Communications Sdn Bhd
<b>LTE in 1800 MHz (Technology Upgrade in their existing GSM band)</b>	Maxis Mobile Services Sdn Bhd
	Celcom Mobile Sdn Bhd
	Digi Telecommunications Sdn Bhd
<b>LTE in 850 MHz</b>	Telekom Malaysia Berhad



# Apparatus Assignment (AA)

# AA Fees



**Refer to Spectrum Regulations 2000 for details**

<i>Nature of Service as Per Spectrum Plan</i>	<i>Type of Apparatus</i>	<i>Annual Fees (RM)</i>
FIXED	Earth Station (less than 2.4 meters)	120.00
	Earth Station (2.4 meters and above)	1,200.00
	Land Station (less than 30 MHz)	60.00
	Land Station (30 MHz up to 3 GHz)	120.00
	Land Station (more than 3 GHz)	240.00

## FEES FOR APPARATUS ASSIGNMENT

RADIODETERMINATION	<i>Bandwidth (per channel)* (kHz)</i>	<i>Variable Fees Annual fees with respect to bands per apparatus (RM)</i>		
		<i>Less than 30 MHz</i>	<i>30 MHz up to 3GHz</i>	<i>More than 3 GHz</i>
SPACE	0.000 - 5.000	42.00	90.00	60.00
	5.001 - 12.000	52.00	110.00	70.00
	12.001 - 25.000	62.00	130.00	90.00
	25.001 - 100.000	113.00	230.00	130.00
	100.001 - 200.000	186.00	380.00	200.00
	200.001 - 1000.000	264.00	520.00	280.00
	1000.001 - 3500.000	342.00	680.00	360.00
	3500.001 - 7000.000	420.00	840.00	440.00
	7000.001 - 14000.000	498.00	1000.00	510.00
	14000.001 - 28000.000	576.00	1160.00	590.00
	28000.001 - 36000.000	654.00	1300.00	670.00
	36000.001 - 54000.000	732.00	1470.00	750.00
	54000.001 or greater	810.00	1620.00	830.00

# Standard Conditions for Assignment



## Communications and Multimedia (Spectrum) Regulations 2000

- a) Use or operate on certified apparatus only;
- b) Pay the fees for the assignment;
- c) Utilize the spectrum beneficially;
- d) Submit a commissioning report;
- e) Comply with all the directions from the Commission;
- f) Ensure that no major interference or harmful interference;
- g) Eliminate any interference;
- h) Cease operation when major interference occurs;
- i) Do not exceed the specified output powers, emission parameters or coverage area approved;
- j) Comply with the technical standards, mandatory standard or voluntary code registered by the Commission;
- k) Comply with the Act and any subsidiary legislation under Act and any other relevant written laws;
- l) Observe the provisions of the International Telecommunication Convention & International Convention for the Safety of Life at Sea.

Please refer Reg. 10  
of Spectrum  
Regulations 2000  
for details

# AA Application and Payment



## Manual submission

**Suruhanjaya Komunikasi dan Multimedia Malaysia**  
Malaysian Communications and Multimedia Commission  
Office of Parliament  
80000 Cyberjaya, Selangor Darul Ehsan  
Tel: 6 (0) 88888888 Fax: 6 (0) 88881111 [www.skkmm.gov.my](http://www.skkmm.gov.my)

**APPLICATION FOR APPARATUS ASSIGNMENT (S)**  
(MOBILE SERVICE)

New apparatus       Type of apparatus (Please refer to instructions)

Existing apparatus      Client ID no.      Assignment no. (S)      Category

Application Fee: **RM10** per application

[Click here to view application form for mobile service apparatus assignment](#)

**1. CLIENT INFORMATION**

Organization name: \_\_\_\_\_  
Applicant name: \_\_\_\_\_  
Address / Postcode: \_\_\_\_\_  
Town / State: \_\_\_\_\_ Postal code: \_\_\_\_\_  
Mailing address (if different from above): \_\_\_\_\_ Postal code: \_\_\_\_\_  
Telephone (office/home): \_\_\_\_\_ Fax: \_\_\_\_\_ E-mail: \_\_\_\_\_  
Contact person: \_\_\_\_\_ Company / Organisation (inc. no.): \_\_\_\_\_  
Nature of business: \_\_\_\_\_ NRIC no.: \_\_\_\_\_

**2. APPLICATION INFORMATION**

Proposed use of system / System description: \_\_\_\_\_

**3. GEOGRAPHIC AREA INFORMATION** (Only applicable to Cellular Radio Base Station, Paging Base Station, Private Use Station, Mobile Contract Station, Trunked Radio Base Station, Experimental Station, Unearth Channel Base Station, Aeronautical Fixed Station, Coast Station, Wireless Alarm Station, Amateur Receiver Station and Cordless Base Station)

Location name: \_\_\_\_\_  
Site address: \_\_\_\_\_  
Town / State: \_\_\_\_\_ Postal code: \_\_\_\_\_  
Apparatus name: \_\_\_\_\_ Ground elevation (above Mean Sea Level): \_\_\_\_\_  
Number of floors / FLOOR LEVEL (storey): \_\_\_\_\_  
Geographic area of operation: \_\_\_\_\_ Coverage radius (km): \_\_\_\_\_  
Latitude (°N): \_\_\_\_\_ Longitude (°E): \_\_\_\_\_  
Structure height (m): \_\_\_\_\_ Building height (m): \_\_\_\_\_

**4. FREQUENCY INFORMATION**

Desired channel frequency (MHz): \_\_\_\_\_ Desired receive frequency (MHz): \_\_\_\_\_  
Communication channel with: \_\_\_\_\_  
Desired channel frequency (MHz): \_\_\_\_\_ Desired receive frequency (MHz): \_\_\_\_\_  
Communication channel with: \_\_\_\_\_  
Bandwidth (MHz): \_\_\_\_\_  
Basis: \_\_\_\_\_  
with the base: \_\_\_\_\_

Mobile Service Form 137

Visual radio: \_\_\_\_\_  
Category: \_\_\_\_\_  
Gross weight tonnage:  <300 tons       300 to 1000 tons       > 1000 tons  
Area of operation: \_\_\_\_\_  
Home port: \_\_\_\_\_

Note: Please attach Certificate of Malaysian Registry (COMR) and Ship Survey Certificate.

**11. APPARATUS INFORMATION** (Only applicable to Ship Station)

Manufacturer / Model / Serial no. / Approval no.	Power	Frequency Band	List in g. category (see 137-140)

## Electronic submission

**SKMM** Suruhanjaya Komunikasi dan Multimedia Malaysia  
Malaysian Communications and Multimedia Commission

**Welcome to e-Spektrum**

- LOGIN
- HOW TO APPLY
- FEE INFO
- ABOUT SKMM
- CONTACT US
- HELP

e-Spektrum is your electronic gateway for submissions of apparatus assignment to Suruhanjaya Komunikasi dan Multimedia Malaysia.  
Submission of applications for the following apparatus assignments may be done here:

- Amateur Service
- Broadcasting Service
- Earth Station
- Radio Determination Service
- Mobile Service
- Fixed Service
- Space Service

Click ["How to apply"](#) link for more information on applying AA online.  
[Important Legal Notice](#)

## Online payment

**SKMM** ePayment Portal  
Your One Stop Payment Centre

Bahasa Melayu | English

Home Apparatus Assignment Exam Voucher

Home > Notice Review

\* Payments can be made between 7 am to 11pm daily.

Main Menu

- Notice Review
- Service Information
- Apparatus Assignment
- Class and Individual License
- Postal and Courier Service
- Universal Service Provision
- Contribution

Client Number: \_\_\_\_\_  
Notice No. / Application No.: \_\_\_\_\_

We accept:

VISA      MASTERCARD      MEPS      FPX  
CIMB Clicks      CIMB Bio-Channel      Hong Leong CityNet Personal      Hong Leong CityNet Business      Maybank2u      myAkaun2u.com  
BANK ISLAM

# AA Interactive Guideline (AAIG)

➤ AAIG is to guide public or applicants to obtain information on the Apparatus Assignment before submitting application.

- <http://aaig.skmm.gov.my/Flash.aspx>

- General
- Type of Services
- Checking Mechanism
- Fee Calculation
- Equipment Reference Table
- Downloads
- Register
- FAQ
- Contact Us

