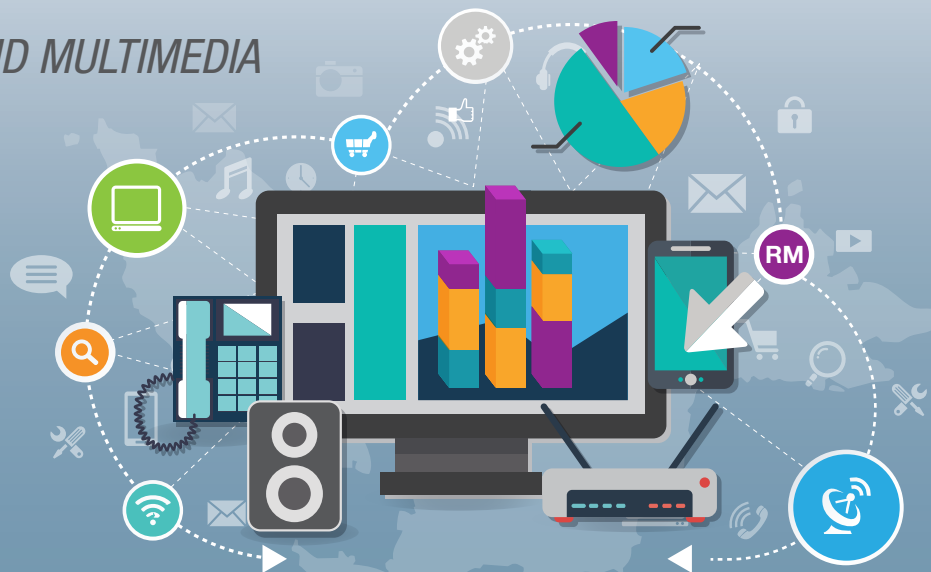


# KOMUNIKASI DAN MULTIMEDIA

## Buku Maklumat Statistik

*COMMUNICATIONS AND MULTIMEDIA*  
*Pocket Book of Statistics*



**2016**  
EDISI KHAS  
SPECIAL EDITION



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

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63000 Cyberjaya, Selangor Darul Ehsan  
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## 10

**MATLAMAT DASAR KEBANGSAAN BAGI INDUSTRI KOMUNIKASI DAN MULTIMEDIA**  
*NATIONAL POLICY OBJECTIVES FOR THE COMMUNICATIONS AND MULTIMEDIA INDUSTRY*

- 1** Menjadikan Malaysia sebagai pusat dan tumpuan utama dunia bagi perkhidmatan komunikasi dan perkhidmatan maklumat dan kandungan multimedia  
*To establish Malaysia as a major global centre and hub for communications and multimedia information and content services*
- 2** Menggalakkan pewujudan masyarakat madani yang dalamnya perkhidmatan berdasarkan maklumat akan menyediakan asas bagi peningkatan yang berterusan kepada mutu kerja dan hidup  
*To promote a civil society where information-based services will provide the basis of continuing enhancements to quality of work and life*
- 3** Mencambahkan dan memupuk sumber maklumat dan perlambangan budaya tempatan yang membantu mengetengahkan identiti kebangsaan dan kepelbagaian dunia  
*To grow and nurture local information resources and cultural representation that facilitates the national identity and global diversity*
- 4** Mengawal selia bagi faedah jangka panjang pengguna akhir  
*To regulate for the long-term benefit of the end user*
- 5** Menggalakkan tahap keyakinan pengguna yang tinggi dalam penyampaian perkhidmatan daripada industri itu  
*To promote a high level of consumer confidence in service delivery from the industry*
- 6** Memastikan penyediaan perkhidmatan sama rata yang mampu dibayar melalui infrastruktur kebangsaan yang sentiasa ada  
*To ensure an equitable provision of affordable services over ubiquitous national infrastructure*
- 7** Mewujudkan suasana aplikasi yang giat bagi pengguna akhir  
*To create a robust application environment for end users*
- 8** Memudahkan pengalihan secara berkesan sumber seperti tenaga buruh mahir, modal, pengetahuan dan aset kebangsaan  
*To facilitate the efficient allocation of resources such as skilled labour, capital, knowledge and national assets*
- 9** Menggalakkan pembinaan keupayaan dan kecekapan dalam industri percantuman Malaysia  
*To promote the development of capabilities and skills within Malaysia's convergence industries*
- 10** Menjamin keselamatan maklumat dan kebolehpercayaan serta keutuhan rangkaian  
*To ensure information security and network reliability and integrity*

## Nota

Sekiranya sesuatu jadual tidak diikuti oleh nota tentang sumber data, maka seluruh data yang terkandung di dalamnya berpunca semata-mata daripada Suruhanjaya Komunikasi dan Multimedia Malaysia (MCMC).

Angka-angka awalan dicondongkan.

Angka-angka yang dipinda digariskan.

Angka yang terkandung dalam sesuatu jadual merujuk kepada penghujung tempoh. Sebagai contoh, kadar penembusan tahunan bagi sesuatu perkhidmatan dikira dengan menggunakan jumlah langganan dan anggaran jumlah penduduk pada hujung tahun. Ini adalah berbeza daripada amalan demografi Malaysia di mana jumlah penduduk pertengahan tahun dianggap sebagai jumlah penduduk tahunan. Sekiranya kedua-dua amalan ini hendaklah diselaraskan kepada norma demografi, maka kadar penembusan seperti pada penghujung Jun hendaklah digunakan.

Jumlah campuran mungkin berbeza kerana pembundaran.

## Notes

*Where a table is not accompanied by a source acknowledgement, that table carries data that emanated solely from the Malaysian Communications and Multimedia Commission (MCMC).*

*Preliminary figures are italicised.*

*Revised figures are underscored.*

*Figures presented in tables are as at the end of the period. Hence a penetration rate for a given year is calculated using the number of subscriptions and estimated population as at the end of the year. This is different from the Malaysian demographic practice of using the mid-year population as the population for that year. If the practices need to be synchronised to the demographic norm, then the penetration rates as at end June of that year must be used.*

*The added total may differ due to rounding.*

## Simbol dan Singkatan

...	Tidak diperolehi
<b>MCMC</b>	<b>Suruhanjaya Komunikasi dan Multimedia Malaysia</b>
<b>KKMM</b>	<b>Kementerian Komunikasi dan Multimedia Malaysia</b>
<b>DOSM</b>	<b>Jabatan Perangkaan Malaysia</b>
<b>ITU</b>	<b>International Telecommunication Union</b>

## *Symbols and Abbreviations*

...	<i>Not available</i>
<i>MCMC</i>	<i>Malaysian Communications and Multimedia Commission</i>
<i>KKMM</i>	<i>Ministry of Communications and Multimedia Malaysia</i>
<i>DOSM</i>	<i>Department of Statistics, Malaysia</i>
<i>ITU</i>	<i>International Telecommunication Union</i>

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## KANDUNGAN

### CONTENTS

**10 Matlamat Dasar Kebangsaan Bagi Industri Komunikasi dan Multimedia**  
*10 National Policy Objectives for the Communications and Multimedia Industry*

I

**Nota**  
*Notes*

II

**Simbol dan singkatan**  
*Symbols and abbreviations*

III

**Snapshot 2016**  
*Snapshot 2016*

X

**SPECIAL REPORT ON OVERVIEW OF BROADBAND MARKET IN 2016**

1

**PENUNJUK-PENUNJUK ASAS**  
*BASIC INDICATORS*

**1. Petunjuk-petunjuk asas Malaysia**  
*Malaysia basic indicators*

12

**2. Kadar penembusan sepintas lalu (%)**  
*Penetration rates at a glance (%)*

14

**3. Bilangan lesen**  
*Number of licences*

16

**JALUR LEBAR DAN INTERNET***BROADBAND AND INTERNET***4. Kadar penembusan jalur lebar per 100 penduduk mengikut negeri (%)***Broadband penetration rate per 100 inhabitants by state (%)*

18

**5. Bilangan langganan jalur lebar***Number of broadband subscriptions*

20

**6. Peratus pengguna Internet mengikut jantina (%)***Percentage of Internet users by gender (%)*

21

**7. Peratus pengguna Internet mengikut kategori umur (%)***Percentage of internet users by age category (%)*

22

**8. Peratusan capaian komputer isi rumah mengikut negeri (%)***Percentage of computer access by household by state (%)*

23

**9. Langganan jalur lebar tetap per 100 penduduk, negara-negara ASEAN (%)***Fixed-broadband subscriptions per 100 inhabitants, ASEAN countries (%)*

24

**10. Langganan jalur lebar tetap per 100 penduduk bagi 10 rakan dagang terbesar, Malaysia (%)***Fixed-broadband subscriptions per 100 inhabitants for 10 biggest trading partners, Malaysia (%)*

26

**SELULAR MUDAH ALIH***MOBILE CELLULAR***11. Bilangan langganan selular mudah alih dan kadar penembusan***Number of mobile cellular subscriptions and penetration rate*

30



## VII

### 12. Kadar penembusan selular mudah alih per 100 penduduk mengikut negeri (%)

*Mobile cellular penetration rate per 100 inhabitants by state (%)*

32

### 13. Kemudahan nombor

*Mobile number portability*

33

### 14. Peratus pengguna telefon bimbit mengikut jantina (%)

*Percentage of handphone users by gender (%)*

34

### 15. Bilangan khidmat pesanan ringkas (SMS)

*Number of short message services (SMS)*

35

### 16. Langganan selular mudah alih per 100 penduduk, negara-negara ASEAN (%)

*Mobile-cellular subscriptions per 100 inhabitants, ASEAN countries (%)*

36

### 17. Langganan selular mudah alih per 100 penduduk bagi 10 rakan dagang terbesar, Malaysia (%)

*Mobile-cellular subscriptions per 100 inhabitants for 10 biggest trading partners, Malaysia (%)*

38

## TELEFON TETAP

*FIXED TELEPHONES*

### 18. Bilangan langganan telefon tetap dan kadar penembusan

*Number of fixed telephone subscriptions and penetration rate*

42

### 19. Bilangan langganan Talian Ibu sawat Terus dan kadar penembusan

*Number of Direct Exchange Line (DEL) subscriptions and penetration rate*

44

### 20. Kadar penembusan Talian Ibu sawat Terus per 100 isi rumah mengikut negeri (%)

*Direct Exchange Line (DEL) penetration rate per 100 households by state (%)*

45

## VIII

### 21. Langganan telefon tetap per 100 penduduk negara-negara ASEAN (%)

*Fixed telephone subscriptions per 100 inhabitants, ASEAN countries (%)*

47

### 22. Langganan telefon tetap per 100 penduduk bagi 10 rakan dagang terbesar, Malaysia (%)

*Fixed telephone subscriptions per 100 inhabitants for 10 biggest trading partners, Malaysia (%)*

49

## TV DAN RADIO

*TV AND RADIO*

### 23. Bilangan minit penyiaran, TV bebas ke udara

*Number of broadcast minutes, free to air TV*

52

### 24. Bilangan langganan TV berbayar dan kadar penembusan

*Number of pay TV subscriptions and penetration rate*

53

### 25. Peratusan capaian televisyen isi rumah mengikut negeri (%)

*Percentage of television access by household by state (%)*

55

### 26. Peratus isi rumah yang mempunyai kemudahan peralatan video/VCD/DVD mengikut negeri (%)

*Percentage of households with access to VCR/VCD/DVD by state (%)*

56

### 27. Peratusan capaian radio isi rumah mengikut negeri (%)

*Percentage of radio access by household by state (%)*

57

## TANDATANGAN DIGITAL

*DIGITAL SIGNATURE*

### 28. Bilangan lesen pihak berkuasa pemerakuan

*Number of certification authorities*

60

**29. Bilangan sijil yang dikeluarkan mengikut jenis**

*Number of certificates issued by type*

**KEDUDUKAN MALAYSIA DALAM INDEKS BERKAITAN ICT**

*MALAYSIA RANKING FOR ICT RELATED INDICES*

**30. Kedudukan Malaysia dalam indeks berkaitan ICT**

*Malaysia ranking for ICT related indices*

## JALUR LEBAR BROADBAND



**Jumlah langganan jalur lebar (juta)**  
*Total broadband subscriptions (million)*

**31.0**



**Jumlah langganan jalur lebar isi rumah (juta)**  
*Total households broadband subscriptions (million)*

**6.2**



**Kadar penembusan jalur lebar per 100 isi rumah (%)**  
*Broadband penetration rate per 100 households (%)*

**81.5**



**Jumlah langganan jalur lebar tetap (juta)**  
*Total fixed broadband subscriptions (million)*

**2.5**



**Jumlah langganan jalur lebar mudah alih (juta)**  
*Total mobile broadband subscriptions (million)*

**28.5**

## TELEFON TETAP FIXED TELEPHONES

**4.5**

**Jumlah langganan telefon tetap (juta)**  
*Total fixed telephone subscriptions (million)*

**14.6**

**Kadar penembusan telefon tetap per 100 penduduk (%)**  
*Fixed telephone penetration rate per 100 inhabitants (%)*



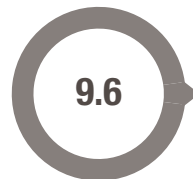
## SELULAR MUDAH ALIH MOBILE-CELLULAR



**Jumlah langganan selular mudah alih (juta)**  
*Total mobile-cellular subscriptions (million)*



**Kadar penembusan selular mudah alih per 100 penduduk (%)**  
*Mobile-cellular penetration rate per 100 inhabitants (%)*

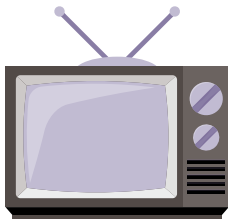


**Langganan pascabayar (juta)**  
*Postpaid subscriptions (million)*



**Langganan prabayar (juta)**  
*Prepaid subscriptions (million)*

## TV BERBAYAR PAY TV



**6.2**  
**Jumlah langganan TV berbayar (juta)**  
*Total pay TV subscriptions (million)*

**Kadar penembusan TV berbayar per 100 isi rumah (%)**  
*Pay TV penetration rate per 100 households (%)*

**79.0**

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# *SPECIAL REPORT ON OVERVIEW OF BROADBAND MARKET IN 2016*



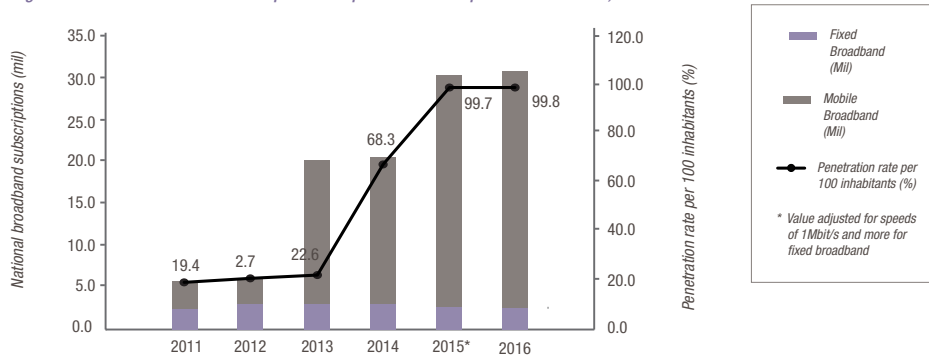
## SPECIAL REPORT ON OVERVIEW OF BROADBAND MARKET IN 2016

### INTRODUCTION

Since 2011, the broadband market in Malaysia continues to grow strongly. Over the last 6 years, broadband subscriptions grew at an average annual growth rate of 32.6%.

As at end 2016, the total broadband subscriptions<sup>1</sup> were at 31.0 million with broadband penetration rate per 100 inhabitants stood at 99.8%. This growth was mainly driven by mobile broadband segment as a result of increasing use of smartphones, wider 3G and 4G coverage and intense competition. In addition, innovative and competitive new data plans and promotions by service providers managed to boost take up of broadband.

Figure 1: National broadband subscriptions and penetration rate per 100 inhabitants, 2011 – 2016



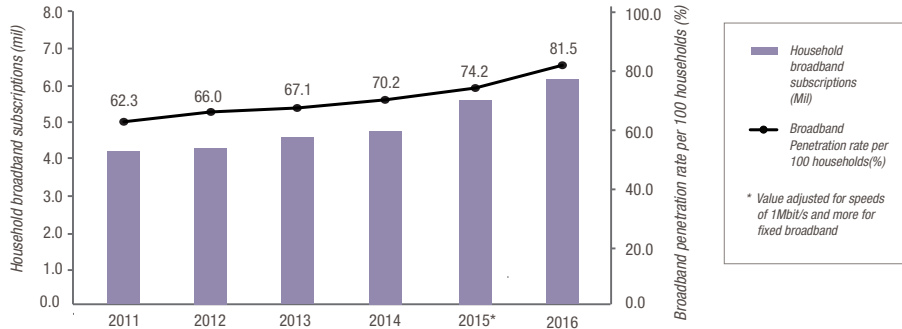
Beginning 2016 onwards, for purpose of reporting, MCMC will not include subscriptions with speeds less than 1 Mbit/s. Accordingly, value for 2015 has been adjusted to exclude subscriptions with speeds less than 1 Mbit/s. Figures for 2011-2014 are maintained for broadband speeds of equal to, or more than 256 Kbit/s.



### Malaysia achieved 81.5% household penetration rate

Broadband penetration rate per 100 households<sup>2</sup> has grown steadily from 2011 to 2016, reaching 81.5% in 2016. Household broadband subscriptions increased by 11.6% to 6.2 million in 2016 from 5.5 million in 2015, contributed by substantial increase in postpaid mobile broadband segment.

Figure 2: National broadband subscriptions and penetration rate per 100 households, 2011 – 2016



The broadband penetration rate per 100 households is calculated by dividing the number of household subscriptions by the number of households and multiplied by 100, as follows:

$$\frac{(\text{Household subscriptions})}{(\text{No. of households})} \times 100 = \text{Broadband penetration rate per 100 households}$$

## *FIXED BROADBAND*

*Fixed broadband is being provided via Asymmetric Digital Subscriber Line (ADSL), Symmetric Digital Subscriber Line (SDSL), Very-high-bit-rate Digital Subscriber Line (VDSL), Fiber to the Home (FTTH), Satellite, Fixed Wireless Access (FWA), Evolution-Data Optimized (EVDO), and Fixed Worldwide Interoperability for Microwave Access (WiMAX).*

*Fixed broadband continues to play a vital role in providing broadband connectivity. In 2016, fixed broadband contributed 8.0% of total broadband market share or 2.5 million of subscriptions (2015:2.8 million).*

*The decline was caused by substitution from fixed to mobile broadband as well as requirement set by International Telecommunication Union (ITU) to classify WiMAX into fixed and mobile broadband<sup>3</sup>.*

## *High Speed Broadband grew at around 245.0% year-on-year*

*Malaysia has made significant progress in High Speed Broadband<sup>4</sup> deployment, as a result of copper-to-fiber migration and consumers' appetite for rich and premium multimedia services. This has driven demand for higher bandwidth and better quality of services with more capacity.*

*This has contributed to the significant increase of 243.8% from 0.28 million in 2015 to 0.97 million in 2016 in number of subscriptions by type of speed equals to or more than 10 Mbit/s.*

*Table 1: Fixed broadband subscriptions by type of speed*

Type of speed (Mbit/s)	Subscriptions ('000)	
	2015	2016
$1 \leq x < 10$	1,961	1,524
$\geq 10$	281	966
<i>Others</i>	575	0
<b>Total</b>	<b>2,817</b>	<b>2,490</b>

Subscriptions of copper-based technologies (ADSL, SDSL and VDSL) declined by 1.0% to 1.25 million in 2016 from 1.26 million in 2015.

*Table 2: Fixed broadband subscriptions by technology*

Mode of Access	Total Subscriptions ('000)	
	2015	2016
ADSL	1,263	1,250
SDSL	4	3
VDSL	1	1
FTTH	59	93
HSBB	958	1,090
Satellite	4	2
FWA	2	1
Cable Modem	15	n/a
EV-DO	3	n/a
Fixed WiMAX	507	50
<b>Total</b>	<b>2,817</b>	<b>2,490</b>

## MOBILE BROADBAND

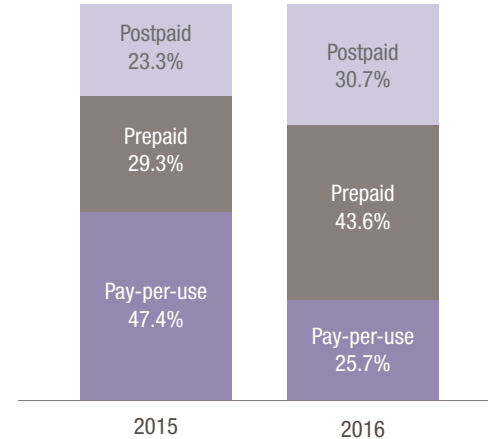
Mobile broadband subscriptions reached 28.5 million in 2016, an increase of 2.8% from 27.8 million in 2015. Mobile broadband subscriptions reflect 92.0% of total broadband subscriptions. That was mainly attributed to the following factors:

- i. **High smartphone ownership.** According to Internet User Survey 2016 (IUS 2016), conducted by MCMC, it was found that 89.3% of Internet users in Malaysia used smartphone to access the Internet. In addition, the percentage of smartphone ownership rose to 90.7% in 2015 compared with 74.3% in 2014.
- ii. **Upgrade and expansion of network coverage.** Service providers continue to invest in 3G and 4G LTE network deployment. In 2016, 3G population coverage has reached 91.9% whilst 4G LTE population coverage rose to 63.9% from 53.6% in 2015.
- iii. **Intense competition.** Service providers were aggressive in offering more innovative and attractive packages, with lower price and more value-added services (VAS), which provide consumers with more choices at affordable prices.

Prepaid segment contributed the largest market share of mobile broadband subscriptions in 2016, at 43.6%, as compared with 29.3% in 2015. This is followed by postpaid with 30.7% in 2016, as compared with 23.3% in 2015.

On the other hand, pay-per-use subscriptions has significantly dropped in 2016, with its market share reduced to 25.7% in 2016 from 47.4% in 2015.

Figure 3: Mobile broadband market shares by segment



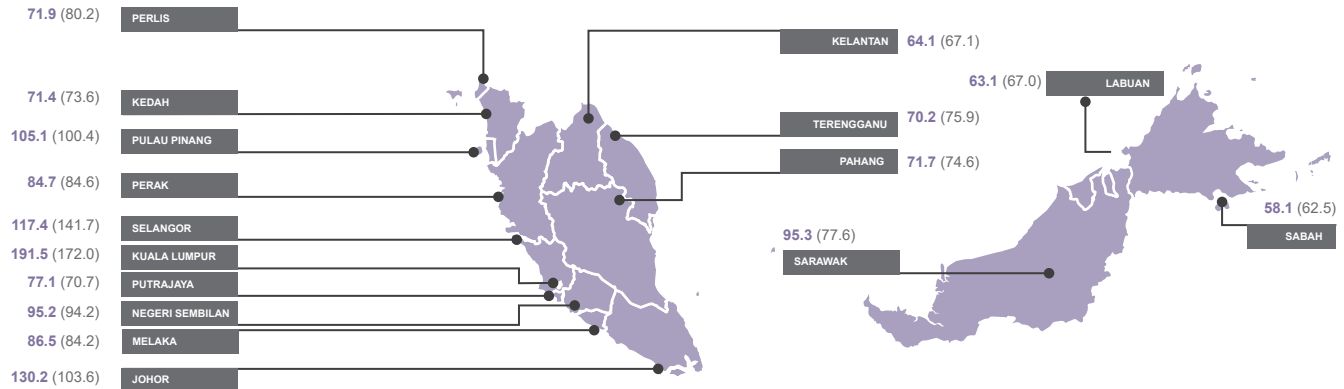
## Broadband penetration rate per 100 inhabitants by states

Wilayah Persekutuan Kuala Lumpur continues to record the highest broadband penetration rate per 100 inhabitants in 2016 at 191.5%, an increase of 19.1% year-on-year. Another two high impact states have also recorded a penetration rate higher than national level of 99.8%, namely, Johor (130.2%) and Pulau Pinang (105.1%) due to the increase in mobile broadband subscriptions of 1.0 million and 0.1 million respectively.

There were five states (Melaka, Negeri Sembilan, Perak, Putrajaya and Sarawak) recorded some increase in their broadband penetration rate, despite recording a penetration rate below national level.

For instance, in Sarawak, better mobile broadband coverage through installation of new sites, upgrading of 2G sites to 3G and installation of small cell sites at selected longhouses have attracted consumers to subscribe mobile broadband. Sarawak recorded a penetration of 95.3% in 2016, an increase of 17.7% from 77.6% in 2015.

Figure 4: Broadband penetration rate per 100 inhabitants by state, 2016 (2015\* figure in bracket)



*On the other hand, in 2016 there were eight states which recorded a decline in their broadband penetration rate namely, Kedah, Kelantan, Pahang, Perlis, Sabah, Selangor, Terengganu and Wilayah Persekutuan Labuan. It was partly due to the drop in pay-per-use subscriptions for mobile broadband as a result of termination, switching to postpaid or prepaid plan as well as reduction in multi SIM subscriptions.*

*With regard to Selangor, a decline of 25.0% in broadband penetration rate was mainly contributed by Celcom's adjustment and reconciliation of their pay-per-use subscriptions. According to Celcom, this is due to a number of systems-related issues encountered in 2016, as a result of its IT transformation programme. States other than Wilayah Persekutuan Kuala Lumpur, Johor, Selangor and Pulau Pinang registered penetration rate between 58.0% and 95.3%, which is below national average.*

## **OUTLOOK**

*Going forward, MCMC foresees that the fixed broadband will grow at a reasonable rate of 3% per annum over the next 5-year period (2017-2021). This is driven by the higher demand for bandwidth to support digital services as well as quadruple play.*

*FTTH will be the fastest growing technology with average annual growth of 9.0% during the forecast period. The government's plan to provide Malaysians with affordable broadband at higher speeds through initiative of "Double the Speed at the Same Price" in 2017 is expected to boost take-up of fixed broadband subscriptions with speeds more than 10 Mbit/s.*

*Competitive pricing continues to drive mobile broadband growth. The number of mobile broadband subscriptions will continue to grow steadily in 2017 onwards, with prepaid subscriptions continue to dominate the mobile broadband market. However, there was a growing trend of gradual shift to postpaid subscriptions in 2015. Postpaid and prepaid segments are expected to grow at an average annual growth of 2.0% over the forecast period. In view of the higher proportion of prepaid subscriptions, there is a tendency for high churn rate as switching is made possible with the mobile number portability and less consumer loyalty to a particular brand or service provider.*

*Explanatory notes:*

- 1 *Proportion of individuals with broadband access that can be provided via fixed network at downstream speeds of  $\geq 1$  Mbit/s or mobile networks (e.g. WCDMA, HSPA, WiMAX IEEE 802.16e and LTE)*
- 2 *Proportion of households with unique subscription of broadband access that can be provided via fixed network at downstream speeds of  $\geq 1$  Mbit/s or mobile networks (e.g. WCDMA, HSPA, WiMAX IEEE 802.16e and LTE). A household consists of related and/or unrelated persons who usually live together and make common provisions for food and other essentials of livings*
- 3 *Previously, all WiMAX subscriptions were included under fixed broadband*
- 4 *Broadband access with speed  $\geq 10$  Mbit/s*

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# **PENUNJUK-PENUNJUK ASAS MALAYSIA** *MALAYSIA BASIC INDICATORS*



## 1 PENUNJUK-PENUNJUK ASAS MALAYSIA

### MALAYSIA BASIC INDICATORS

Tahun Year	Suku Quarter	Penduduk Population	Isi rumah Households	KDNK GDP		Indeks Harga Pengguna (IHP) Consumer Price Index (CPI)
				Harga semasa Current prices	Harga malar Constant prices	
				(juta/million)	('000)	
<b>Nota/Notes</b>		a	b		c	d
<b>2015</b>	<b>4</b>	30.68	7,483	304.0	277.9	112.8
<b>2016</b>	<b>1</b>	30.78	7,527	291.0	265.1	114.3
	<b>2</b>	30.88	7,551	298.5	271.3	114.4
	<b>3</b>	30.97	7,575	311.8	280.9	114.7
	<b>4</b>	31.07	7,599	328.0	290.6	115.2

Sumber / Source : DOSM, MCMC

**Nota penjelasan:**

*Explanatory notes:*

**a. Unjuran penduduk seperti pada penghujung tempoh berdasarkan Banci 2010**

*Population projections as at end of period, based on Census 2010*

**b. Bilangan isi rumah diperolehi dengan membahagikan bilangan penduduk dengan purata saiz isi rumah**

*Number of households derived by dividing populations by average household size*

**Isi rumah ditakrifkan sebagai seorang atau sekumpulan orang yang bersaudara atau orang tidak bersaudara yang biasanya tinggal bersama dan membuat peruntukan yang sama untuk makanan dan keperluan hidup yang lain**

*A household consists of related and/or unrelated persons who usually live together and make common provisions for food and other essentials of living.*

**c. Tahun asas adalah 2010**

*Base year is 2010*

**d. Tahun asas adalah 2010**

*Base year is 2010*

**IHP bagi sesuatu suku tahun merujuk kepada indeks purata dari 1 Januari hingga hujung suku tahun tersebut**

*The CPI reported against a quarter, refers to the average index for the period spanning 1st January to the end of that quarter*

## 2 KADAR PENEMBUSAN SEPINTAS LALU (%)

### PENETRATION RATES AT A GLANCE (%)

Tahun Year	Suku Quarter	Jalur lebar Broadband		Selular mudah alih Mobile-cellular	Talian Ibu sawat Terus Direct Exchange Line (DEL)
		per 100 penduduk per 100 inhabitants	per 100 isi rumah per 100 households	per 100 penduduk per 100 inhabitants	per 100 isi rumah per 100 households
<b>Nota/Notes</b>		a		b	c
<b>2015</b>	<b>4</b>	<u>99.7</u>	<u>74.2</u>	143.8	27.9
<b>2016</b>	<b>1</b>	<u>99.7</u>	<u>75.9</u>	143.4	27.5
	<b>2</b>	<u>95.9</u>	<u>74.1</u>	140.9	26.9
	<b>3</b>	<u>98.1</u>	<u>74.8</u>	141.6	26.6
	<b>4</b>	99.8	81.5	141.3	26.1

#### Nota penjelasan:

*Explanatory notes:*

- a. Kadar penembusan jalur lebar per 100 penduduk dikira dengan membahagi jumlah langganan isi rumah dan langganan bukan isi rumah ditambah dengan langganan pay per use dengan jumlah penduduk dan didarab dengan 100. Langganan Wi-Fi awam tidak diambilkira  
*The broadband penetration rate per 100 inhabitants is calculated by dividing the sum of household and non-household subscriptions added with pay per use subscriptions by the number of inhabitants and multiplying by 100. Public Wi-Fi subscriptions are not taken into account*

**Kadar penembusan jalur lebar per 100 isi rumah dikira dengan membahagi jumlah langganan isi rumah dengan jumlah isi rumah dan didarab dengan 100**

*The broadband penetration rate per 100 households is calculated by dividing the number of household subscriptions by the number of households and multiplied by 100*

**Bermula suku keempat 2015, pengiraan langganan dan kadar penembusan jalur lebar disemak semula dengan tidak lagi mengambil kira jalur lebar tetap yang berkelajuan kurang daripada 1 Mbit/s**

*Commencing Q4 2015, the calculation for broadband subscriptions and penetration rates are revised to exclude fixed broadband with downstream speeds less than 1 Mbit/s*

**b. Kadar penembusan selular mudah alih dikira sebagai jumlah langganan dibahagi jumlah penduduk dan didarabkan dengan 100. Penembusan yang melebihi 100% boleh berpunca daripada pelanggan yang melanggan melebihi daripada satu langganan**

*The mobile cellular penetration rate refers to the total subscriptions divided by the total population and multiplied by 100. A penetration rate over 100% can occur because of multiple subscriptions*

**c. Kadar penembusan Talian Ibu sawat Terus per 100 isi rumah dikira dengan membahagi jumlah langganan isi rumah dengan jumlah isi rumah dan didarab dengan 100**

*The Direct Exchange Line (DEL) penetration rate per 100 households is calculated by dividing the number of household subscriptions by the number of households and multiplying by 100*

### 3 BILANGAN LESEN PADA 31 DISEMBER 2016

NUMBER OF LICENCES AS AT 31 DECEMBER 2016

	Bilangan lesen No. of licences		
	Individu Individual	Kelas Class	Jumlah Total
<b>Penyedia Kemudahan Rangkaian</b> <i>Network Facilities Provider (NFP)</i>	176	15	191
<b>Penyedia Perkhidmatan Rangkaian</b> <i>Network Service Provider (NSP)</i>	156	15	171
<b>Penyedia Perkhidmatan Aplikasi</b> <i>Applications Service Provider (ASP)</i>		456	456
<b>Penyedia Perkhidmatan Aplikasi Kandungan</b> <i>Content Applications Service Provider (CASP)</i>	48	12	60
<b>Jumlah</b> <i>Total</i>	380	498	878

# JALUR LEBAR DAN INTERNET

## *BROADBAND AND INTERNET*



#### 4 KADAR PENEMBUSAN JALUR LEBAR PER 100 PENDUDUK MENGIKUT NEGERI (%)

BROADBAND PENETRATION RATE PER 100 INHABITANTS BY STATE (%)

Tahun/Year	2015	2016			
Suku/Quarter	4	1	2	3	4
Negeri/State					
Johor	103.6	153.7	135.6	135.5	130.2
Kedah	73.6	73.6	69.8	70.8	71.4
Kelantan	67.1	66.1	63.0	63.7	64.1
Melaka	84.2	85.4	84.6	84.4	86.5
Negeri Sembilan	94.2	95.8	94.8	95.1	95.2
Pahang	74.6	73.7	72.9	71.1	71.7
Perak	84.6	84.0	83.8	84.7	84.7
Perlis	80.2	80.5	68.9	70.2	71.9
Pulau Pinang	100.4	101.8	100.9	102.3	105.1
Sabah	62.5	60.0	57.5	58.3	58.1
Sarawak	77.6	75.5	75.1	76.0	95.3
Selangor	141.7	113.0	113.1	116.0	117.4
Terengganu	75.9	74.2	69.4	69.4	70.2
W. P. Kuala Lumpur	172.0	177.2	172.1	176.6	191.5
W.P. Labuan	67.0	74.3	74.3	64.2	63.1
W.P. Putrajaya	70.7	72.6	70.5	72.5	77.1
<b>Malaysia</b>	<b>99.7</b>	<b>99.7</b>	<b>95.9</b>	<b>98.1</b>	<b>99.8</b>

#### Nota penjelasan:

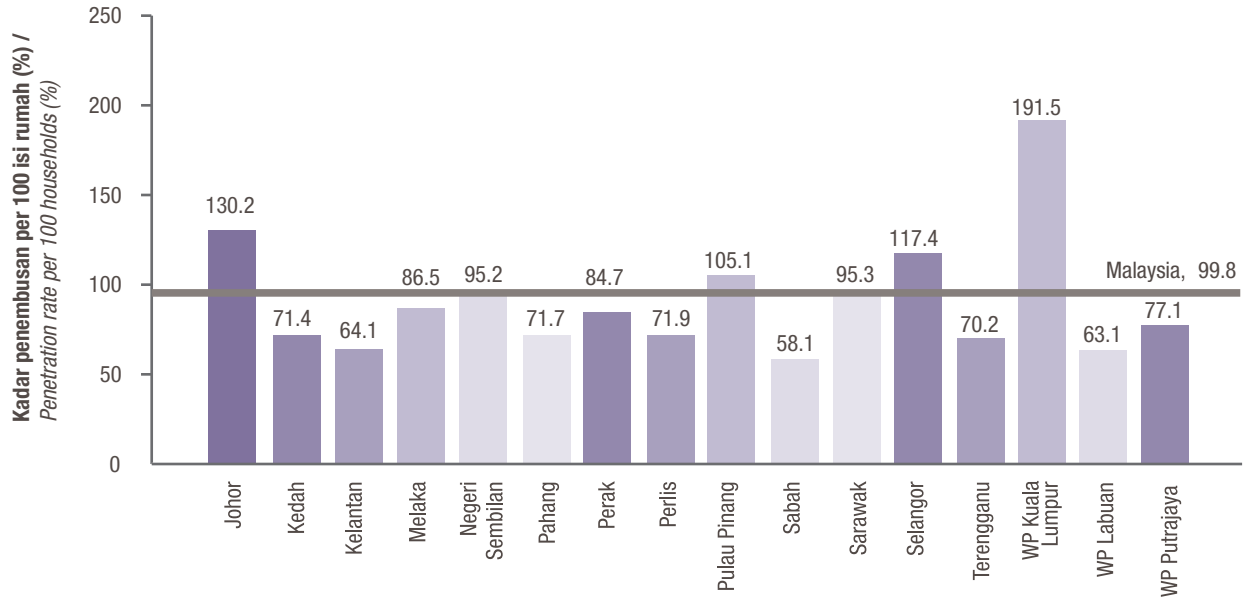
Explanatory notes:

#### Sila rujuk nota (a) bagi Jadual 2

Please see note (a) Table 2



KADAR PENEMBUSAN JALUR LEBAR PER 100 PENDUDUK MENGIKUT NEGERI, 2016  
 BROADBAND PENETRATION RATE PER 100 INHABITANTS BY STATE, 2016



## 5 BILANGAN LANGGANAN JALUR LEBAR

### NUMBER OF BROADBAND SUBSCRIPTIONS

Tahun Year	Suku Quarter	Tetap Fixed	Mudah alih Mobile	Jumlah Total
		(juta / million)		
Nota/Notes		a	b	
2015	4	<u>2.8</u>	27.8	<u>30.6</u>
2016	1	<u>2.5</u>	28.2	<u>30.7</u>
	2	<u>2.5</u>	27.1	<u>29.6</u>
	3	<u>2.5</u>	27.9	<u>30.4</u>
	4	2.5	28.5	31.0

#### Nota penjelasan:

*Explanatory notes:*

- a. Termasuk ADSL, SDSL, VDSL, Satelit, FTTH, Fixed wireless, EV-DO, dan WiMAX tetap**  
*Includes ADSL, SDSL, VDSL, Satellite, FTTH, Fixed wireless, EV-DO, and fixed WiMAX*

**Bemula suku keempat 2015, pengiraan langganan dan kadar penembusan jalur lebar disemak semula dengan tidak lagi mengambil kira jalur lebar tetap yang berkelajuan kurang daripada 1 Mbit/s**  
*Commencing Q4 2015, the calculation for broadband subscriptions and penetration rates are revised to exclude fixed broadband with downstream speeds less than 1 Mbit/s*

- b. Termasuk prabayar, pascabayar, Pay Per Use, dan WiMAX mudah alih**  
*Includes prepaid, postpaid, Pay Per Use, and mobile WiMAX*

**Jumlah campuran mungkin berbeza kerana pembundaran**  
*The added total may differ due to rounding*

**6 PERATUS PENGGUNA INTERNET MENGIKUT JANTINA (%)**  
*PERCENTAGE OF INTERNET USERS BY GENDER (%)*

<b>Tahun</b> <i>Year</i>	<b>Lelaki</b> <i>Male</i>	<b>Perempuan</b> <i>Female</i>
<b>2014</b>	58.3	41.7
<b>2015</b>	59.4	40.6
<b>2016</b>	57.4	42.6

**Nota penjelasan:**

*Explanatory notes:*

**Jadual 6 dan 7 adalah daripada Kajian Pengguna Internet yang dijalankan oleh MCMC bermula pada tahun 2012**

*Tables 6 and 7 are from Internet Users Surveys conducted by the MCMC beginning from 2012*

## 7 PERATUS PENGGUNA INTERNET MENGIKUT KATEGORI UMUR (%)

*PERCENTAGE OF INTERNET USERS BY AGE CATEGORY (%)*

Kategori umur <i>Age category</i>	2014	2015	2016
<b>Bawah 15</b> ( <i>Below 15</i> )	1.6	0.9	0.4
<b>15-19</b>	13.9	14.6	12.6
<b>20-24</b>	24.2	22.0	21.4
<b>25-29</b>	19.3	16.2	16.7
<b>30-34</b>	13.1	14.0	15.4
<b>35-39</b>	8.7	10.6	10.5
<b>40-44</b>	7.3	7.6	8.0
<b>45-49</b>	4.6	5.7	6.2
<b>50 dan ke atas</b> ( <i>50 and above</i> )	7.3	8.5	8.5

**Nota penjelasan:**

*Explanatory notes:*

**Sila rujuk nota bagi Jadual 6**

*Please see note by Table 6*

## 8 PERATURAN CAPAIAN KOMPUTER ISI RUMAH MENGIKUT NEGERI (%)

*PERCENTAGE OF COMPUTER ACCESS BY HOUSEHOLD BY STATE (%)*

Negeri State	2015
Johor	68.7
Kedah	51.1
Kelantan	50.3
Melaka	71.9
Negeri Sembilan	57.1
Pahang	59.4
Perak	57.8
Perlis	69.2
Pulau Pinang	71.4
Sabah	60.1
Sarawak	61.4
Selangor	82.5
Terengganu	62.6
WP Kuala Lumpur	80.9
WP Labuan	83.5
WP Putrajaya	98.8
<b>Malaysia</b>	<b>67.6</b>

**Sumber:**

*Source:*

**Laporan Penyiasatan Penggunaan dan Capaian ICT oleh Individu dan Isi Rumah 2015, DOSM**

*ICT Use and Access by Individuals and Households Survey Report 2015, DOSM*

## 9 LANGGANAN JALUR LEBAR TETAP PER 100 PENDUDUK, NEGARA-NEGARA ASEAN (%)

*FIXED-BROADBAND SUBSCRIPTIONS PER 100 INHABITANTS, ASEAN COUNTRIES (%)*

Tahun Year	Singapura Singapore	Malaysia	Thailand	Viet Nam	Brunei Darussalam
Nota/Notes		a			
2014	26.7	10.1	8.1	6.5	7.1
2015	<u>26.4</u>	<u>9.2</u>	9.2	8.1	8.0

Tahun Year	Filipina Philippines	Indonesia	Kemboja Cambodia	Lao P.D.R.	Myanmar
Nota/Notes					
2014	2.9	1.2	0.4	0.2	...
2015	<u>4.8</u>	1.1	0.5	0.5	<u>0.1</u>

Sumber / Source : MCMC, ITU

**Nota penjelasan:**

*Explanatory notes:*

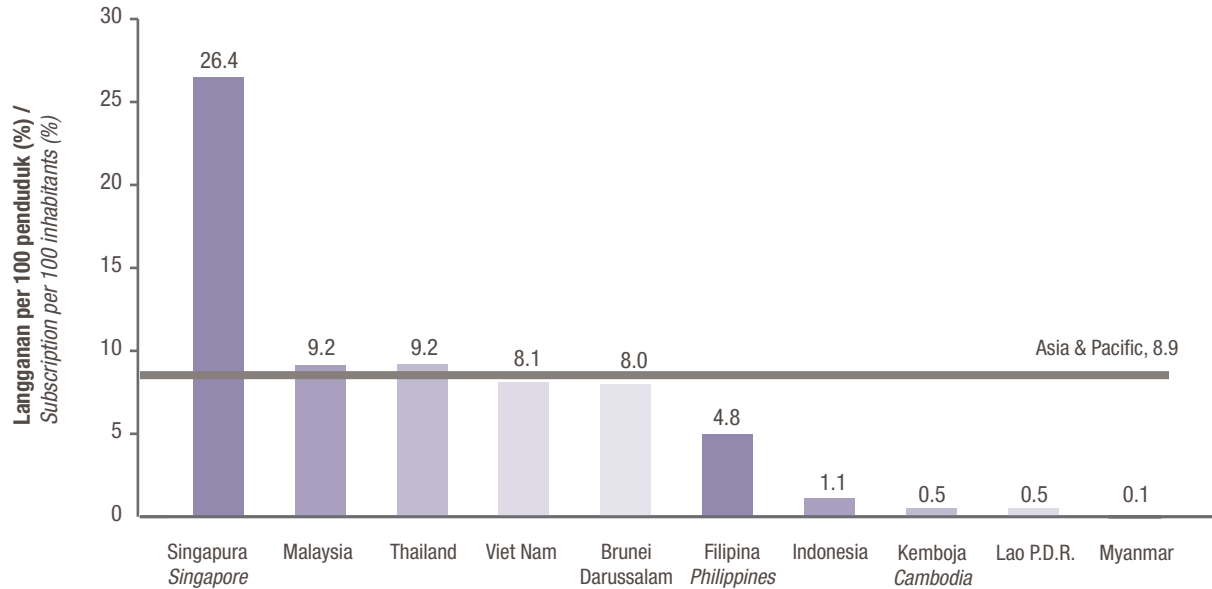
**a. Angka mungkin berbeza dengan pengiraan ITU disebabkan oleh perbezaan bilangan penduduk yang digunakan**

Figure may differ from ITU calculation due to the difference in the number of population used

**Angka-angka untuk 2016 tidak diperolehi semasa terbitan dokumen ini. Angka-angka tersebut akan diterbitkan oleh ITU dalam “Measuring The Information Society Report 2017”**

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LANGGANAN JALUR LEBAR TETAP PER 100 PENDUDUK, NEGARA-NEGARA ASEAN, 2015  
FIXED-BROADBAND SUBSCRIPTIONS PER 100 INHABITANTS, ASEAN COUNTRIES, 2015



**10 LANGGANAN JALUR LEBAR TETAP PER 100 PENDUDUK BAGI 10 RAKAN DAGANG TERBESAR, MALAYSIA (%)**  
**FIXED-BROADBAND SUBSCRIPTIONS PER 100 INHABITANTS FOR 10 BIGGEST TRADING PARTNERS, MALAYSIA (%)**

Tahun Year	Korea Selatan South Korea	Hong Kong SAR	Amerika Syarikat USA	Jepun Japan	Singapura Singapore	Taiwan
<b>Nota/Notes</b>						
<b>2014</b>	38.8	31.4	30.3	29.8	26.7	31.9
<b>2015</b>	40.3	<u>32.1</u>	<u>31.0</u>	<u>30.7</u>	<u>26.4</u>	24.3

Tahun Year	China	Malaysia	Thailand	India	Indonesia
<b>Nota/Notes</b>		<b>a</b>			
<b>2014</b>	14.4	10.1	8.1	1.2	1.2
<b>2015</b>	<u>19.8</u>	<u>9.2</u>	9.2	1.3	1.1

Sumber / Source : MCMC, ITU

**Nota penjelasan:**

*Explanatory notes:*

**a. Angka mungkin berbeza dengan pengiraan ITU disebabkan oleh perbezaan bilangan penduduk yang digunakan**

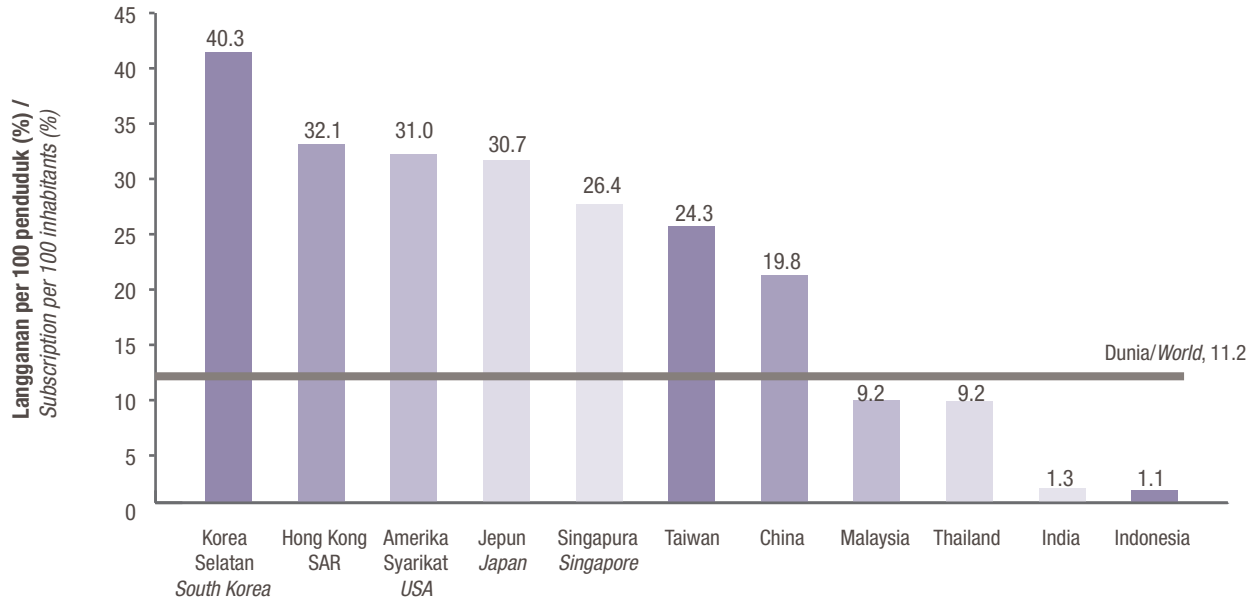
Figure may differ from ITU calculation due to the difference in the number of population used

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LANGGANAN JALUR LEBAR TETAP PER 100 PENDUDUK BAGI 10 RAKAN DAGANG TERBESAR, MALAYSIA, 2015  
FIXED-BROADBAND SUBSCRIPTIONS PER 100 INHABITANTS FOR 10 BIGGEST TRADING PARTNERS, MALAYSIA, 2015



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# SELULAR MUDAH ALIH

## *MOBILE CELLULAR*



## 11 BILANGAN LANGGANAN SELULAR MUDAH ALIH DAN KADAR PENEMBUSAN

### NUMBER OF MOBILE CELLULAR SUBSCRIPTIONS AND PENETRATION RATE

Tahun Year	Suku Quarter	Pascabayar Postpaid	Prabayar Prepaid	Jumlah Total	Kadar penembusan per 100 penduduk (%) Penetration rate per 100 inhabitants (%)
		('000)			
2015	4	8,740	35,364	44,104	143.8
2016	1	8,902	35,247	44,149	143.4
	2	9,175	34,337	43,512	140.9
	3	9,255	34,617	43,872	141.6
	4	9,639	34,273	43,913	141.3

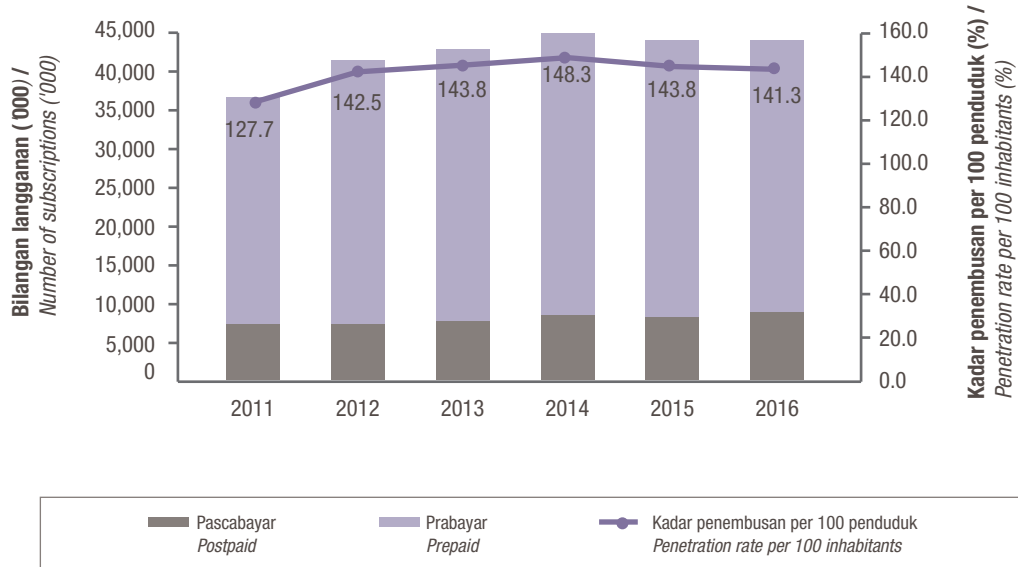
**Nota penjelasan:**

*Explanatory notes:*

**Sila rujuk nota (b) bagi Jadual 2**

*Please see note (b) Table 2*

BILANGAN LANGGANAN SELULAR MUDAH ALIH DAN KADAR PENEMBUSAN  
 NUMBER OF MOBILE CELLULAR SUBSCRIPTIONS AND PENETRATION RATE



**12 KADAR PENEMBUSAN SELULAR MUDAH ALIH PER 100 PENDUDUK MENGIKUT NEGERI (%)**  
**MOBILE CELLULAR PENETRATION RATE PER 100 INHABITANTS BY STATE (%)**

<b>Negeri State</b>	<b>2014 (%)</b>	<b>2015 (%)</b>	<b>2016 (%)</b>
Johor	156.7	129.6	144.8
Kedah	121.9	142.0	122.9
Kelantan	117.5	159.6	127.9
Melaka	159.2	140.0	135.7
Negeri Sembilan	153.3	141.6	155.0
Pahang	148.3	160.9	130.9
Perak	149.2	120.9	121.6
Perlis	103.7	143.0	131.7
Pulau Pinang	143.8	146.8	138.6
Selangor	156.1	157.2	167.2
Terengganu	156.5	165.5	141.8
Sabah	107.4	130.2	112.7
Sarawak	113.0	123.5	120.7
WP Kuala Lumpur	220.8	205.0	207.9
WP Labuan	171.2	133.8	110.4
WP Putrajaya	191.3	210.0	158.2

**Nota penjelasan:**

*Explanatory notes:*

**Jadual 12 dan 14 adalah daripada Kajian Pengguna Telefon Bimbit yang dijalankan oleh MCMC pada setiap tahun**

*Table 12 and 14 are from the Hand Phone Users Surveys conducted by the MCMC annually*

### 13 KEMUDAHALIHAN NOMBOR MOBILE NUMBER PORTABILITY

Tahun Year	Suku Quarter	Permintaan pengalihan nombor Number of porting request	Pengalihan nombor yang berjaya Successful porting
		('000)	
2015	4	787.6	389.0
2016	1	789.9	420.7
	2	860.1	458.2
	3	711.0	386.0
	4	881.5	448.6

**14 PERATUS PENGGUNA TELEFON BIMBIT MENGIKUT JANTINA (%)**  
*PERCENTAGE OF HAND PHONE USERS BY GENDER (%)*

<b>Tahun</b> <i>Year</i>	<b>Lelaki</b> <i>Male</i>	<b>Perempuan</b> <i>Female</i>
<b>2014</b>	56.9	43.1
<b>2015</b>	56.9	43.1
<b>2016</b>	57.0	43.0

**Nota penjelasan:**  
*Explanatory notes:*

**Sila rujuk nota bagi Jadual 12**  
*Please see note by Table 12*



**15 BILANGAN KHIDMAT PESANAN RINGKAS (SMS)**  
*NUMBER OF SHORT MESSAGE SERVICES (SMS)*

Tahun Year	Suku Quarter	Jumlah Total	Per langganan Per subscription
		juta million	
Nota/Notes		a	
2015	4	5,200.9	118
2016	1	4,503.8	102
	2	3,934.7	90
	3	3,597.6	82
	4	3,035.6	69

**Nota penjelasan:**

*Explanatory notes:*

**a. Angka menunjukkan bilangan SMS dihantar dalam tempoh rujukan**

*Figure refers to the number of SMSes sent within the period*

**16 LANGGANAN SELULAR MUDAH ALIH PER 100 PENDUDUK, NEGARA-NEGARA ASEAN (%)**  
*MOBILE-CELLULAR SUBSCRIPTIONS PER 100 INHABITANTS, ASEAN COUNTRIES (%)*

Tahun Year	Thailand	Singapura Singapore	Malaysia	Kemboja Cambodia	Indonesia
Nota/Notes		a			
2014	144.4	146.9	148.3	132.7	128.8
2015	<u>152.7</u>	<u>146.5</u>	143.8	133.0	<u>132.4</u>

Tahun Year	Viet Nam	Filipina Philippines	Brunei Darussalam	Myanmar	Lao P.D.R.
Nota/Notes					
2014	147.1	111.2	106.8	54.0	67.0
2015	130.6	<u>115.8</u>	108.1	<u>75.7</u>	53.1

Sumber / Source : MCMC, ITU

**Nota penjelasan:**

*Explanatory notes:*

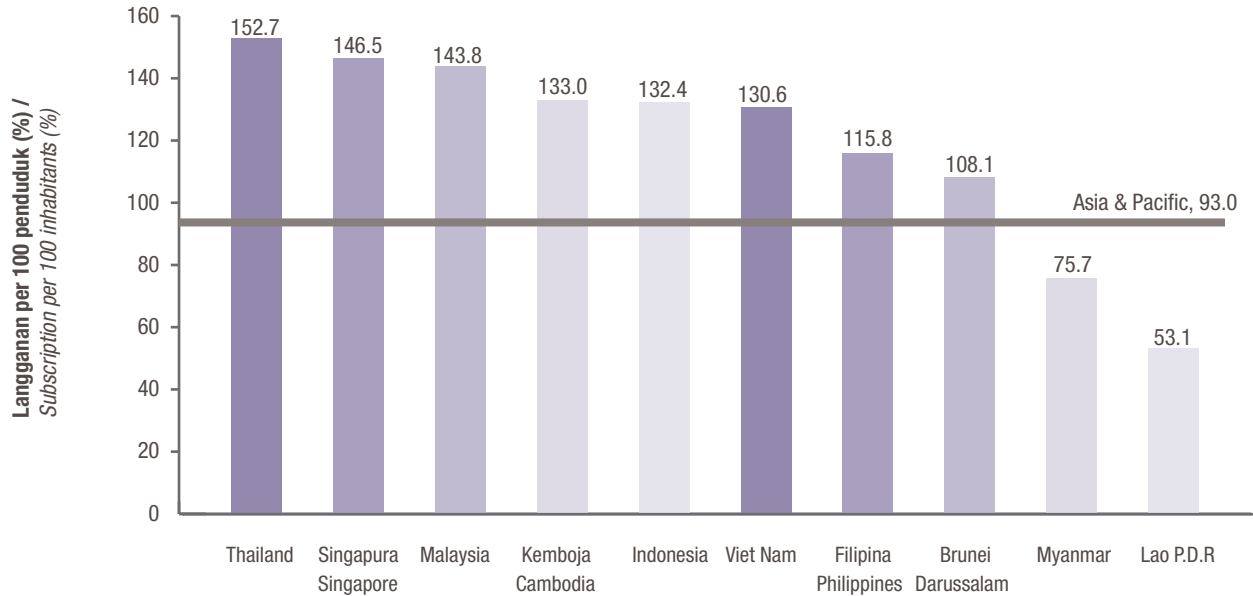
**a. Angka mungkin berbeza dengan pengiraan ITU disebabkan oleh perbezaan bilangan penduduk yang digunakan**

Figure may differ from ITU calculation due to the difference in the number of population used

**Angka-angka untuk 2016 tidak diperolehi semasa terbitan dokumen ini. Angka-angka tersebut akan diterbitkan oleh ITU dalam “Measuring The Information Society Report 2017”**

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LANGGANAN SELULAR MUDAH ALIH PER 100 PENDUDUK, NEGARA-NEGARA ASEAN, 2015  
MOBILE-CELLULAR SUBSCRIPTIONS PER 100 INHABITANTS, ASEAN COUNTRIES, 2015



**17 LANGGANAN SELULAR MUDAH ALIH PER 100 PENDUDUK BAGI 10 RAKAN DAGANG TERBESAR, MALAYSIA (%)**  
**MOBILE-CELLULAR SUBSCRIPTIONS PER 100 INHABITANTS FOR 10 BIGGEST TRADING PARTNERS, MALAYSIA (%)**

Tahun Year	Hong Kong SAR	Thailand	Singapura Singapore	Malaysia	Indonesia	Taiwan
Nota/Notes				a		
<b>2014</b>	233.6	144.4	146.9	148.3	128.8	130.2
<b>2015</b>	<u>228.7</u>	<u>152.7</u>	<u>146.5</u>	143.8	<u>132.4</u>	127.3

Tahun Year	Jepun Japan	Korea Selatan South Korea	Amerika Syarikat USA	China	India
Nota/Notes					
<b>2014</b>	<u>122.2</u>	115.7	110.2	92.3	74.5
<b>2015</b>	<u>126.5</u>	118.5	117.6	<u>92.2</u>	<u>78.1</u>

Sumber / Source : MCMC, ITU

**Nota penjelasan:**

*Explanatory notes:*

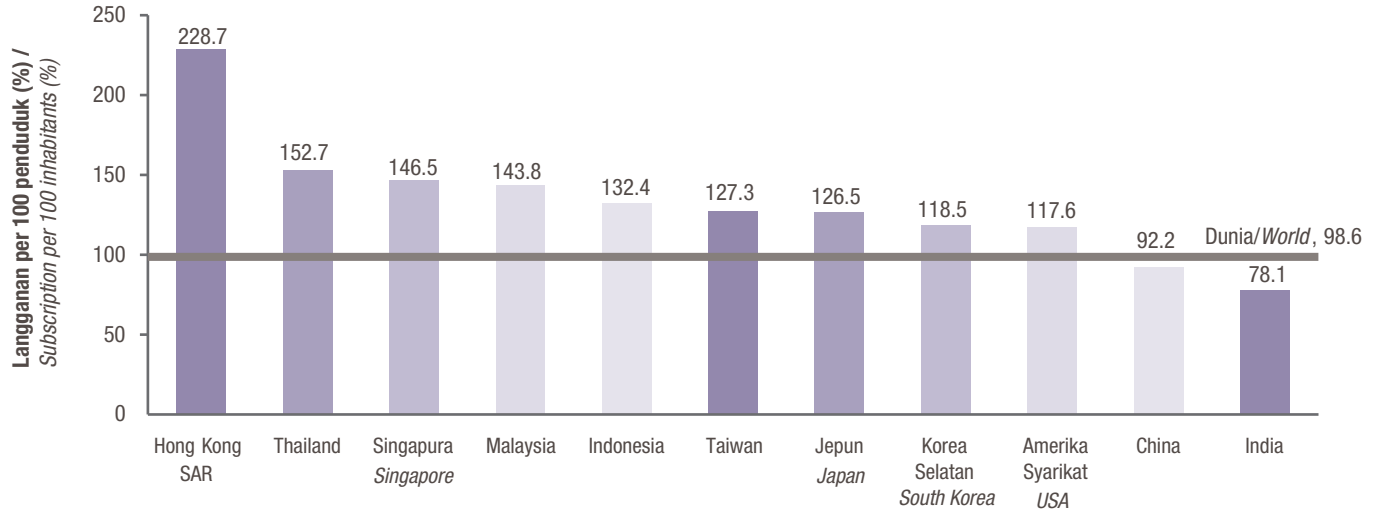
**a. Angka mungkin berbeza dengan pengiraan ITU disebabkan oleh perbezaan bilangan penduduk yang digunakan**

Figure may differ from ITU calculation due to the difference in the number of population used

**Angka-angka untuk 2016 tidak diperolehi semasa terbitan dokumen ini. Angka-angka tersebut akan diterbitkan oleh ITU dalam “Measuring The Information Society Report 2017”**

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LANGGANAN TELEFON SELULAR MUDAH ALIH PER 100 PENDUDUK BAGI 10 RAKAN DAGANG TERBESAR, MALAYSIA, 2015  
MOBILE-CELLULAR SUBSCRIPTIONS PER 100 INHABITANTS FOR 10 BIGGEST TRADING PARTNERS, MALAYSIA, 2015



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# TELEFON TETAP

## *FIXED TELEPHONES*



## 18 BILANGAN LANGGANAN TELEFON TETAP DAN KADAR PENEMBUSAN

### NUMBER OF FIXED TELEPHONE SUBSCRIPTIONS AND PENETRATION RATE

Tahun Year	Suku Quarter	Jumlah langganan Total Subscriptions	Kadar penembusan per 100 penduduk (%) Penetration rate per 100 inhabitants (%)
		('000)	
Nota/Notes		a	
2014	4	4,406.5	<u>14.6</u>
2015	4	4,489.2	<u>14.6</u>
2016	1	4,483.5	14.6
	2	4,550.9	14.7
	3	4,553.6	14.7
	4	4,533.0	14.6

#### Nota penjelasan:

*Explanatory notes:*

**Kadar penembusan telefon tetap dikira sebagai jumlah langganan dan dibahagi jumlah penduduk dan didarabkan dengan 100**

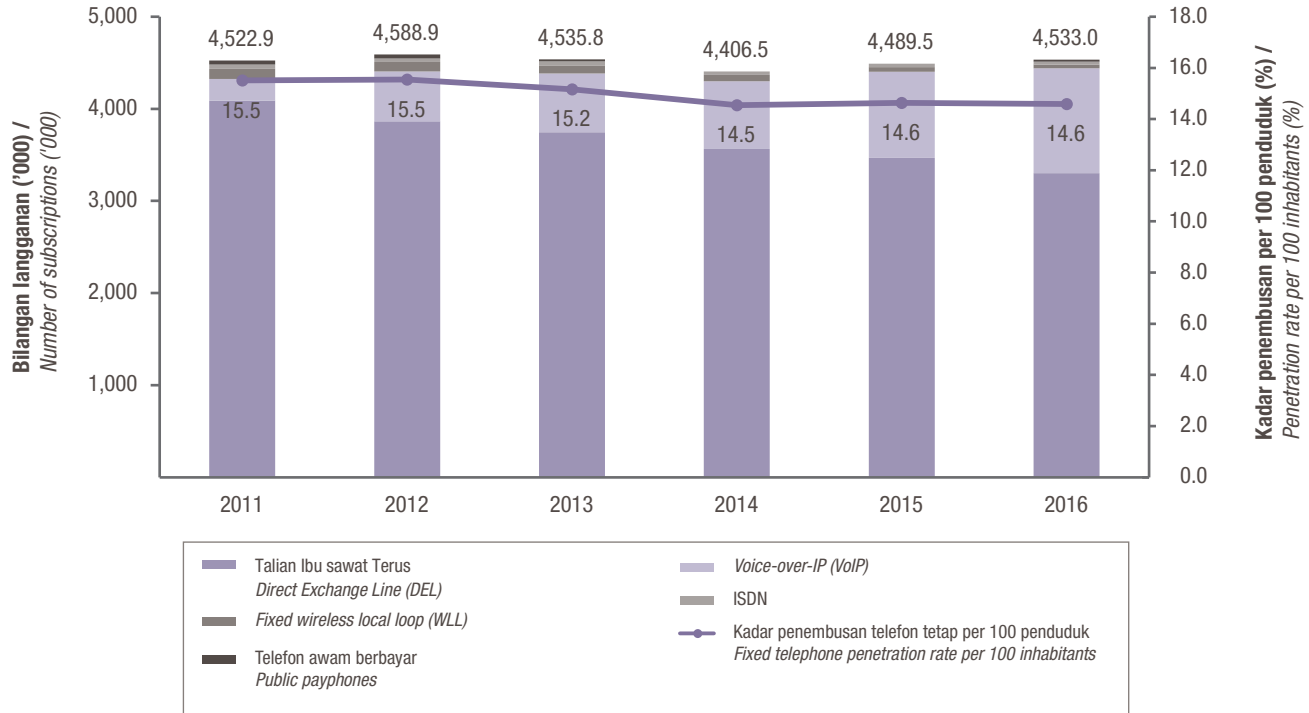
*The fixed telephone penetration rate refers to the total subscriptions divided by the total population and multiplied by 100*

**a. Termasuk Talian Ibu sawat Terus, VoIP, Fixed wireless local loop (WLL), ISDN dan telefon berbayar awam**

*Includes Direct Exchange Line (DEL), VoIP, Fixed wireless local loop (WLL), ISDN and public payphones*



BILANGAN LANGGANAN TELEFON TETAP DAN KADAR PENEMBUSAN  
 NUMBER OF FIXED TELEPHONE SUBSCRIPTIONS AND PENETRATION RATE



## 19 BILANGAN LANGGANAN TALIAN IBU SAWAT TERUS DAN KADAR PENEMBUSAN

NUMBER OF DIRECT EXCHANGE LINE (DEL) SUBSCRIPTIONS AND PENETRATION RATE

Tahun Year	Suku Quarter	Isi rumah Household		Bukan isi rumah Non household	Jumlah langganan Total subscriptions	Kadar penembusan (%) Penetration rate (%)
		Bilangan langganan Number of subscriptions	Kadar penembusan (%) Penetration rate (%)	Bilangan langganan Number of subscriptions		
		('000)	per 100 isi rumah per 100 households	('000)	('000)	per 100 penduduk per 100 inhabitants
<b>2015</b>	<b>4</b>	2,089	27.9	1,377	3,466	11.3
<b>2016</b>	<b>1</b>	2,067	27.5	1,362	3,430	11.1
	<b>2</b>	2,033	26.9	1,346	3,379	<u>10.9</u>
	<b>3</b>	2,013	26.6	1,333	3,346	10.8
	<b>4</b>	1,982	26.1	1,318	3,300	10.6

### Nota penjelasan:

*Explanatory notes:*

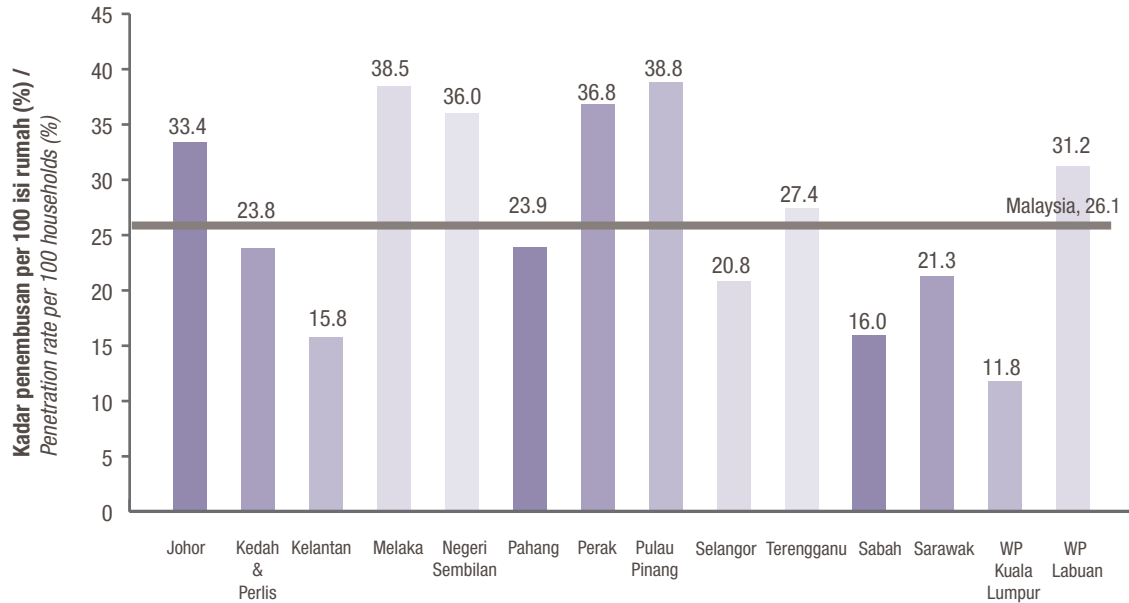
**Sambungan Talian Ibu sawat Terus merujuk kepada talian tetap yang menyambungkan peralatan pelanggan terus ke ibu sawat**

*Direct Exchange Line (DEL) connects a customer's equipment to the Public Switched Telephone Network (PSTN) and has a dedicated port on a telephone exchange*

**20 KADAR PENEMBUSAN TALIAN IBU SAWAT TERUS PER 100 ISI RUMAH MENGIKUT NEGERI (%)**  
*DIRECT EXCHANGE LINE (DEL) PENETRATION RATE PER 100 HOUSEHOLDS BY STATE (%)*

Negeri State	2016			
	Suku 1 Quarter 1	Suku 2 Quarter 2	Suku 3 Quarter 3	Suku 4 Quarter 4
Johor	34.9	34.3	34.0	33.4
Kedah & Perlis	24.9	24.5	24.2	23.8
Kelantan	16.2	16.1	15.9	15.8
Melaka	40.1	39.4	39.1	38.5
Negeri Sembilan	38.2	37.0	36.6	36.0
Pahang	24.8	24.5	24.2	23.9
Perak	38.1	37.7	37.3	36.8
Pulau Pinang	40.9	40.2	39.5	38.8
Selangor	22.5	21.7	21.4	20.8
Terengganu	28.0	27.9	27.7	27.4
Sabah	16.8	16.5	16.3	16.0
Sarawak	22.6	22.2	21.8	21.3
WP Kuala Lumpur	12.6	12.3	12.1	11.8
WP Labuan	33.3	32.7	32.2	31.2
<b>Malaysia</b>	<b>27.5</b>	<b>26.9</b>	<b>26.6</b>	<b>26.1</b>

KADAR PENEMBUSAN TALIAN IBU SAWAT TERUS PER 100 ISI RUMAH MENGIKUT NEGERI, 2016  
DIRECT EXCHANGE LINE (DEL) PENETRATION RATE PER 100 HOUSEHOLDS BY STATE, 2016



## 21 LANGGANAN TELEFON TETAP PER 100 PENDUDUK, NEGARA-NEGARA ASEAN (%)

*FIXED TELEPHONE SUBSCRIPTIONS PER 100 INHABITANTS, ASEAN COUNTRIES (%)*

Tahun Year	Singapura Singapore	Malaysia	Lao P.D.R.	Brunei Darussalam	Indonesia
Nota/Notes		a			
2014	36.2	<u>14.6</u>	13.4	11.4	10.4
2015	36.0	14.6	13.7	9.0	8.8

Tahun Year	Thailand	Viet Nam	Filipina Philippines	Kemboja Cambodia	Myanmar
Nota/Notes					
2014	8.5	6.0	3.1	2.3	1.0
2015	7.9	6.3	<u>3.2</u>	1.6	1.0

Sumber / Source : MCMC, ITU

### Nota penjelasan:

*Explanatory notes:*

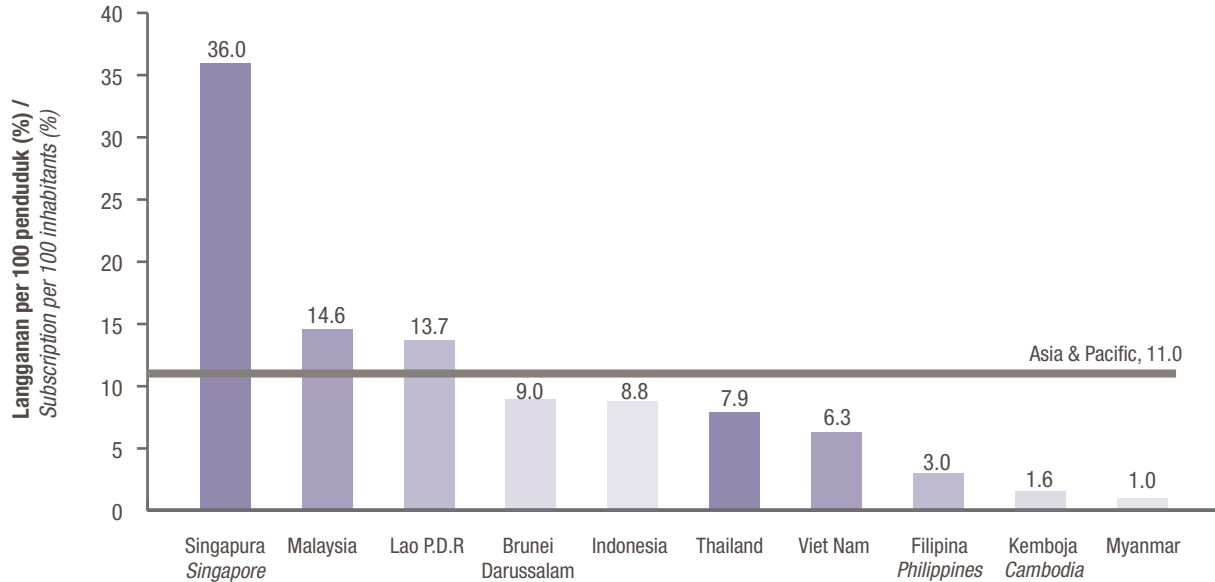
**a. Angka mungkin berbeza dengan pengiraan ITU disebabkan oleh perbezaan bilangan penduduk yang digunakan**

Figure may differ from ITU calculation due to the difference in the number of population used

**Angka-angka untuk 2016 tidak diperolehi semasa terbitan dokumen ini. Angka-angka tersebut akan diterbitkan oleh ITU dalam “Measuring The Information Society Report 2017”**

2016 figures are not available at the time of release of this document. They will be published by ITU in the “Measuring The Information Society Report 2017”

LANGGANAN TELEFON TETAP PER 100 PENDUDUK, NEGARA-NEGARA ASEAN, 2015  
FIXED TELEPHONE SUBSCRIPTIONS PER 100 INHABITANTS, ASEAN COUNTRIES, 2015



## 22 LANGGANAN TELEFON TETAP PER 100 PENDUDUK BAGI 10 RAKAN DAGANG TERBESAR, MALAYSIA (%)

FIXED TELEPHONE SUBSCRIPTIONS PER 100 INHABITANTS FOR 10 BIGGEST TRADING PARTNERS, MALAYSIA (%)

Tahun Year	Taiwan	Hong Kong SAR	Korea Selatan South Korea	Jepun Japan	Amerika Syarikat USA	Singapura Singapore
<b>Nota/Notes</b>						
<b>2014</b>	60.2	60.9	59.5	50.1	39.8	36.2
<b>2015</b>	59.7	59.2	58.1	50.2	<u>38.4</u>	36.0

Tahun Year	China	Malaysia	Indonesia	Thailand	India
<b>Nota/Notes</b>		<b>a</b>			
<b>2014</b>	17.9	<u>14.6</u>	10.4	8.5	2.1
<b>2015</b>	16.5	14.6	8.8	7.9	2.0

Sumber / Source : MCMC, ITU

### Nota penjelasan:

Explanatory notes:

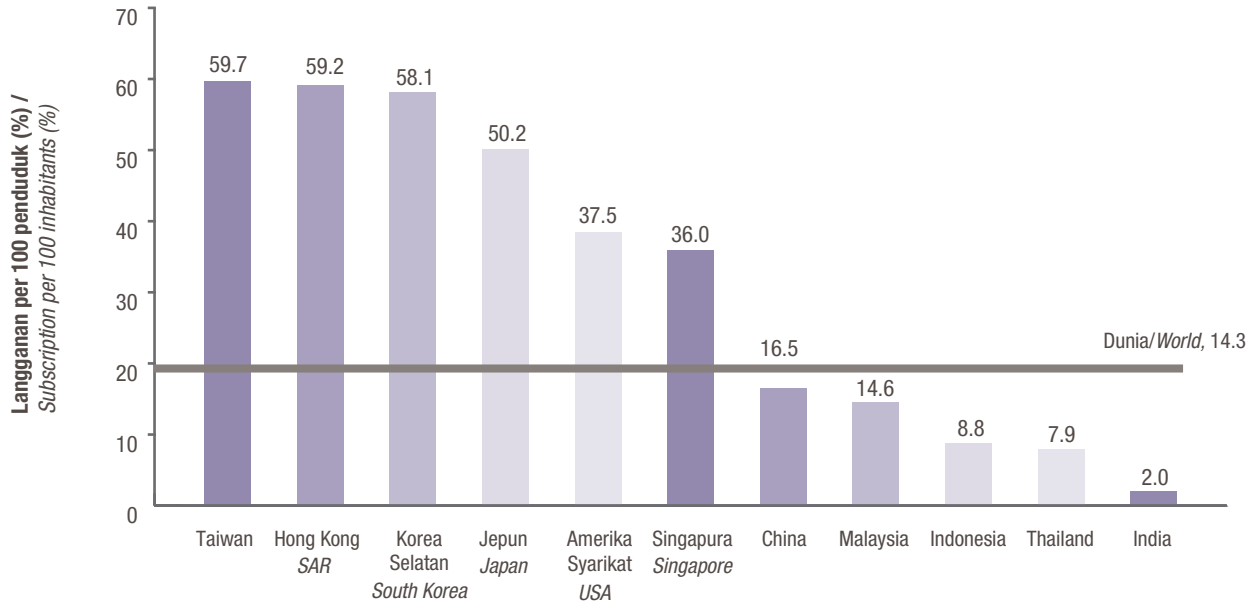
**a. Angka mungkin berbeza dengan pengiraan ITU disebabkan oleh perbezaan bilangan penduduk yang digunakan**

Figure may differ from ITU calculation due to the difference in the number of population used

**Angka-angka untuk 2016 tidak diperolehi semasa terbitan dokumen ini. Angka-angka tersebut akan diterbitkan oleh ITU dalam "Measuring The Information Society Report 2017"**

2016 figures are not available at the time of release of this document. They will be published by ITU in the "Measuring The Information Society Report 2017"

LANGGANAN TELEFON TETAP PER 100 PENDUDUK BAGI 10 RAKAN DAGANG TERBESAR, MALAYSIA, 2015  
 FIXED TELEPHONE SUBSCRIPTIONS PER 100 INHABITANTS FOR 10 BIGGEST TRADING PARTNERS, MALAYSIA, 2015





# TV DAN RADIO

## *TV AND RADIO*



**23 BILANGAN MINIT PENYIARAN, TV BEBAS KE UDARA**  
*NUMBER OF BROADCAST MINUTES, FREE TO AIR TV*

Tahun Year	Suku Quarter	Stesen TV TV station							
		TV1	TV2	TV3	NTV7	8TV	TV9	TV Alhijrah	Jumlah Total
<b>2015</b>	<b>4</b>	130,333	128,984	123,732	95,505	102,213	102,144	89,466	772,377
<b>2016</b>	<b>1</b>	132,086	131,736	130,677	95,699	101,530	98,774	100,752	791,254
	<b>2</b>	132,261	130,780	130,749	96,657	104,899	105,688	110,913	811,947
	<b>3</b>	133,438	132,665	132,354	99,870	107,193	102,347	132,630	840,497
	<b>4</b>	133,231	133,538	131,579	102,622	107,076	101,481	132,310	841,837

**Sumber / Source :** *Nielsen Television Audience Measurement (TAM)*

**24 BILANGAN LANGGANAN TV BERBAYAR DAN KADAR PENEMBUSAN**  
*NUMBER OF PAY TV SUBSCRIPTIONS AND PENETRATION RATE*

Tahun Year	Suku Quarter	Bilangan langganan Number of subscriptions			Kadar penembusan per 100 isi rumah Penetration rate per 100 households
		Isi rumah Household	Bukan isi rumah Non household	Jumlah Total	
		('000)			
<b>2015</b>	<b>4</b>	<u>5,485</u>	<u>167</u>	5,652	73.3
<b>2016</b>	<b>1</b>	5,678	171	5,849	75.4
	<b>2</b>	5,754	176	5,929	76.2
	<b>3</b>	5,820	178	5,999	76.8
	<b>4</b>	6,005	202	6,207	79.0

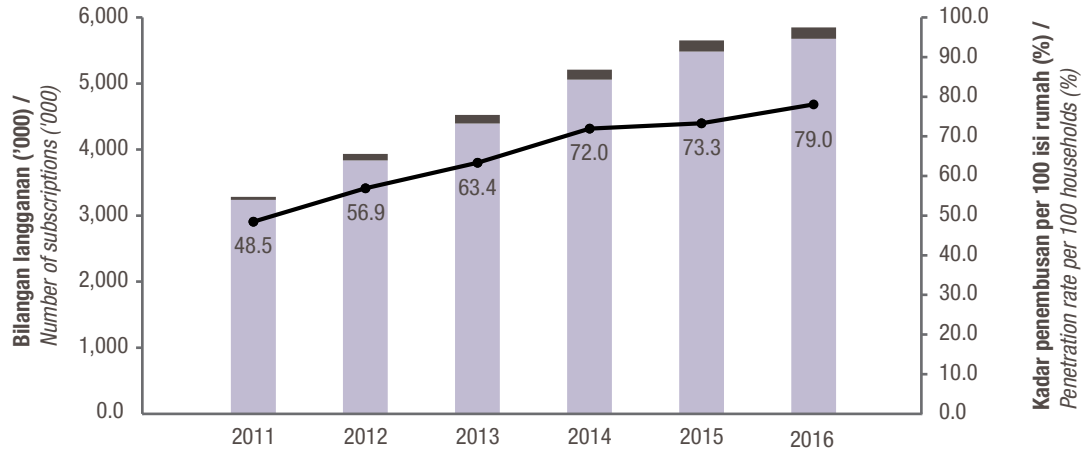
**Nota penjelasan:**

*Explanatory notes:*

**Televisyen berbayar termasuk IPTV**

*Pay TV is inclusive of IPTV*

BILANGAN LANGGANAN TV BERBAYAR DAN KADAR PENEMBUSAN  
 NUMBER OF PAY TV SUBSCRIPTIONS AND PENETRATION RATE



Isi rumah  
Household

Bukan isi rumah  
Non household

Kadar penembusan per 100 isi rumah  
Penetration rate per 100 households

**25 PERATUSAN CAPAIAN TELEVISYEN ISI RUMAH MENGIKUT NEGERI (%)**  
*PERCENTAGE OF TELEVISION ACCESS BY HOUSEHOLD BY STATE (%)*

<b>Negeri State</b>	<b>2015</b>
Johor	99.2
Kedah	98.5
Kelantan	97.9
Melaka	98.9
Negeri Sembilan	99.4
Pahang	98.4
Perak	99.0
Perlis	98.9
Pulau Pinang	99.0
Sabah	95.3
Sarawak	97.2
Selangor	98.9
Terengganu	98.0
WP Kuala Lumpur	99.8
WP Labuan	97.5
WP Putrajaya	100.0
<b>Malaysia</b>	<b>98.4</b>

**Sumber:**

*Source:*

**Laporan Penyiataan Penggunaan dan Capaian ICT oleh Individu dan Isi Rumah 2015, DOSM**  
*ICT Use and Access by Individuals and Households Survey Report 2015, DOSM*

**26 PERATUS ISI RUMAH YANG MEMPUNYAI KEMUDAHAN PERALATAN VIDEO/VCD/DVD MENGIKUT NEGERI (%)**  
*PERCENTAGE OF HOUSEHOLDS WITH ACCESS TO VCR/VCD/DVD BY STATE (%)*

<b>Negeri State</b>	<b>2012</b>	<b>2014</b>
Johor	74.3	73.6
Kedah	58.2	53.8
Kelantan	44.0	39.9
Melaka	69.9	65.8
Negeri Sembilan	51.0	55.5
Pahang	61.5	57.2
Perak	62.4	65.9
Perlis	46.8	51.4
Pulau Pinang	72.0	74.6
Selangor	70.7	58.3
Terengganu	42.4	44.0
Sabah	62.0	59.7
Sarawak	71.8	77.3
WP Kuala Lumpur	75.3	74.1
WP Labuan	65.2	65.4
WP Putrajaya	62.6	64.4
<b>Malaysia</b>	<b>65.4</b>	<b>63.0</b>

**Sumber:**

*Source:*

**Laporan Penyiasatan Pendapatan Isi Rumah dan Kemudahan Asas, DOSM**

*Household Income And Basic Amenities Survey Report, DOSM*

**27 PERATUSAN CAPAIAN RADIO ISI RUMAH MENGIKUT NEGERI (%)**  
*PERCENTAGE OF RADIO ACCESS BY HOUSEHOLD BY STATE (%)*

<b>Negeri State</b>	<b>2015</b>
Johor	91.9
Kedah	93.6
Kelantan	90.3
Melaka	90.6
Negeri Sembilan	96.4
Pahang	91.3
Perak	90.1
Perlis	94.9
Pulau Pinang	88.4
Sabah	81.5
Sarawak	90.0
Selangor	95.4
Terengganu	96.9
WP Kuala Lumpur	99.0
WP Labuan	88.1
WP Putrajaya	100.0
<b>Malaysia</b>	<b>92.1</b>

**Sumber:**

*Source:*

**Laporan Penyiasatan Penggunaan dan Capaian ICT oleh Individu dan Isi Rumah 2015, DOSM**  
*ICT Use and Access by Individuals and Households Survey Report 2015, DOSM*

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# TANDATANGAN DIGITAL

## *DIGITAL SIGNATURE*



## 28 BILANGAN LESEN PIHAK BERKUASA PEMERAKUAN

### NUMBER OF CERTIFICATION AUTHORITIES

Tahun Year	Suku Quarter	Bilangan lesen Number of licenses
2015	4	3
2016	1	3
	2	3
	3	3
	4	3

#### Nota penjelasan:

*Explanatory notes:*

**Merujuk kepada Pihak Berkuasa Pemerakuan yang dilesenkan di bawah Akta Tandatangan Digital 1997**

*Refers to Certification Authorities licenced under the Digital Signature Act 1997*

**29 BILANGAN SIJIL YANG DIKELUARKAN MENGIKUT JENIS**  
*NUMBER OF CERTIFICATES ISSUED BY TYPE*

Tahun Year	Suku Quarter	Pengguna Domestik Domestic holder			Pengguna Luar Negara Foreign holder	Jumlah Total
		Individu Individual	Organisasi Organisation		Organisasi Organisation	
			Korporat Corporate	Kerajaan Government	Korporat Corporate	
		('000)				
<b>2015</b>	<b>4</b>	10.2	234.7	8,146.8	1.1	8,392.8
<b>2016</b>	<b>1</b>	10.2	239.4	8,408.2	1.1	8,658.9
	<b>2</b>	10.2	244.0	9,062.8	1.1	9,318.1
	<b>3</b>	10.3	257.0	9,231.5	1.1	9,499.8
	<b>4</b>	10.3	266.6	9,284.2	1.1	9,562.2

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**KEDUDUKAN MALAYSIA  
DALAM INDEKS BERKAITAN ICT**  
*MALAYSIA RANKING FOR  
ICT RELATED INDICES*



### 30 KEDUDUKAN MALAYSIA DALAM INDEKS BERKAITAN ICT MALAYSIA RANKING FOR ICT RELATED INDICES

Tahun Year	ICT Development Index (IDI)	E-Government Development Index (EGDI)	Networked Readiness Index (NRI)
Nota / Notes	a	b	c
2015	66	...	32
2016	61	60	31

#### Nota penjelasan:

*Explanatory notes:*

- a. **ICT Development Index (IDI):** Indeks ini mengukur tahap kemajuan ICT. Ia juga mengukur jurang digital global dan mengkaji bagaimana jurang ini berkembang pada tahun-tahun kebelakangan ini. Indeks ini diterbitkan oleh *International Telecommunication Union (ITU)*

*ICT Development Index (IDI): This index captures the level of advancement of ICTs. It also measures the global digital divide and examines how it has developed in recent years. This index is published by the International Telecommunications Union (ITU)*

- b. **E-Government Development Index (EGDI):** EGDI menilai pembangunan E-Kerajaan negara-negara anggota Pertubuhan Bangsa-Bangsa Bersatu. Salah satu komponen EGD I adalah *Telecommunication Infrastructure Index (TII)* di mana Malaysia berada di kedudukan ke 70 pada tahun 2016. Indeks ini diterbitkan oleh *UN Public Administration Network* setiap dua tahun

*E-Government Development Index (EGDI): The EGDI presents the state of E-Government Development of the United Nations Member States. One of the component in EGDI is Telecommunication Infrastructure Index (TII), in which Malaysia ranks 70 in 2016. This index is published by the UN Public Administration Network every two years*

- c. ***Networked Readiness Index (NRI)***: NRI mengukur kemampuan negara mengeksplorasi peluang-peluang yang disediakan oleh ICT. Indeks ini telah disusun untuk 139 ekonomi oleh *World Economic Forum*

*Networked Readiness Index (NRI)*: NRI measures the propensity for countries to exploit the opportunities offered by ICT. The index has been compiled for 139 economies by World Economic Forum

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WEBSITE

**Laman sesawang MCMC mengandungi ekstrak statistik-statistik yang berkaitan dengan industri komunikasi & multimedia dan pos & kurier. Statistik-statistik ini dikemaskinikan pada setiap suku/setengah tahun**

*The MCMC website contains extracts of statistics pertaining to the communications & multimedia and postal & courier industry. This is updated quarterly/half yearly*

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#### PENERBITAN STATISTIK YANG LAIN

OTHER STATISTICAL PUBLICATIONS

- 1. Perkhidmatan Pos & Kurier: Buku Maklumat Statistik (ISSN: 2231-9913)**  
*Postal & Courier Services: Pocket Book of Statistics (ISSN: 2231-9913)*
- 2. Kajian Pengguna Telefon Bimbit Tahunan (ISSN: 1823-2523)**  
*Yearly Hand Phone User Survey (ISSN: 1823-2523)*
- 3. Kajian Pengguna Internet Tahunan (ISSN: 1823-2523)**  
*Yearly Internet User Survey (ISSN: 1823-2523)*



**JABATAN STATISTIK**  
*STATISTICS DEPARTMENT*

**HUBUNGI**  
*CONTACTS*

**Sila hubungi Jabatan Statistik MCMC sekiranya anda mempunyai pertanyaan yang berkaitan dengan statistik-statistik yang diterbitkan oleh MCMC di alamat e-mel berikut:**

*Please contact the Statistics Department MCMC if you have any queries regarding the statistics published by MCMC at the following email address:*

**[statistics@cmc.gov.my](mailto:statistics@cmc.gov.my)**

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

MCMC Tower 1, Jalan IMPACT, Cyber 6  
63000 Cyberjaya, Selangor Darul Ehsan, Malaysia  
Tel: +603 8688 8000 Fax: +603 8688 1000  
Website : [www.mcmc.gov.my](http://www.mcmc.gov.my)



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