4Q 2021

Communications & Multimedia Facts & Figures

MCMC

Penetration rates (%)

Fixed-broadband[1]

41.4
3Q 2021: 39.9

Mobile-broadband[2]

128.2
3Q 2021: 127.4

Mobile-cellular[2]

144.0
3Q 2021: 142.1

Pay TV[3]

81.1
3Q 2021: 82.2

Broadband

Total broadband subscriptions ('000)

45,743.5
3Q 2021: 45,214.7
↑ 1.2% QoQ

Fixed-broadband subscriptions ('000)

3,727.4
3Q 2021: 3,585.0
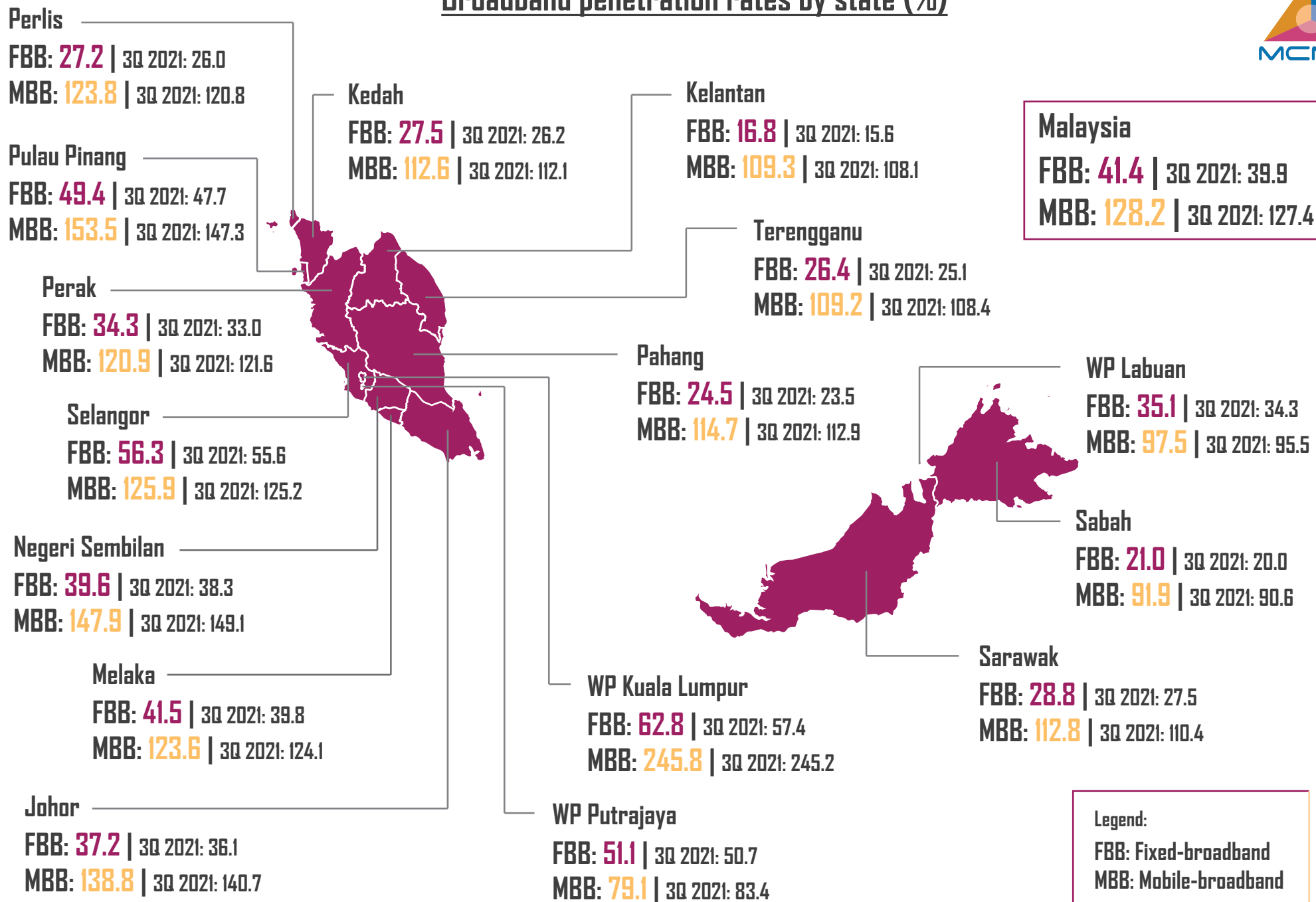
Subscriptions by premise, household and non-household.

Mobile-broadband subscriptions ('000)

42,016.1
3Q 2021: 41,629.7

Subscriptions by individual.

Note:
1. Fixed-broadband refers to penetration rate per 100 premises
2. Mobile-broadband and mobile-cellular refer to penetration rate per 100 inhabitants
3. Pay TV refers to penetration rate per 100 households

Broadband penetration rates by state (%)

MCMC

Perlis
FBB: **27.2** | 3Q 2021: 26.0
MBB: **123.8** | 3Q 2021: 120.8

Kedah
FBB: **27.5** | 3Q 2021: 26.2
MBB: **112.6** | 3Q 2021: 112.1

Kelantan
FBB: **16.8** | 3Q 2021: 15.6
MBB: **109.3** | 3Q 2021: 108.1

Malaysia
FBB: **41.4** | 3Q 2021: 39.9
MBB: **128.2** | 3Q 2021: 127.4

Pulau Pinang
FBB: **49.4** | 3Q 2021: 47.7
MBB: **153.5** | 3Q 2021: 147.3

Terengganu
FBB: **26.4** | 3Q 2021: 25.1
MBB: **109.2** | 3Q 2021: 108.4

Perak
FBB: **34.3** | 3Q 2021: 33.0
MBB: **120.9** | 3Q 2021: 121.6

Pahang
FBB: **24.5** | 3Q 2021: 23.5
MBB: **114.7** | 3Q 2021: 112.9

WP Labuan
FBB: **35.1** | 3Q 2021: 34.3
MBB: **97.5** | 3Q 2021: 95.5

Selangor
FBB: **56.3** | 3Q 2021: 55.6
MBB: **125.9** | 3Q 2021: 125.2

Sabah
FBB: **21.0** | 3Q 2021: 20.0
MBB: **91.9** | 3Q 2021: 90.6

Negeri Sembilan
FBB: **39.6** | 3Q 2021: 38.3
MBB: **147.9** | 3Q 2021: 149.1

Melaka
FBB: **41.5** | 3Q 2021: 39.8
MBB: **123.6** | 3Q 2021: 124.1

WP Kuala Lumpur
FBB: **62.8** | 3Q 2021: 57.4
MBB: **245.8** | 3Q 2021: 245.2

Sarawak
FBB: **28.8** | 3Q 2021: 27.5
MBB: **112.8** | 3Q 2021: 110.4

Johor
FBB: **37.2** | 3Q 2021: 36.1
MBB: **138.8** | 3Q 2021: 140.7

WP Putrajaya
FBB: **51.1** | 3Q 2021: 50.7
MBB: **79.1** | 3Q 2021: 83.4
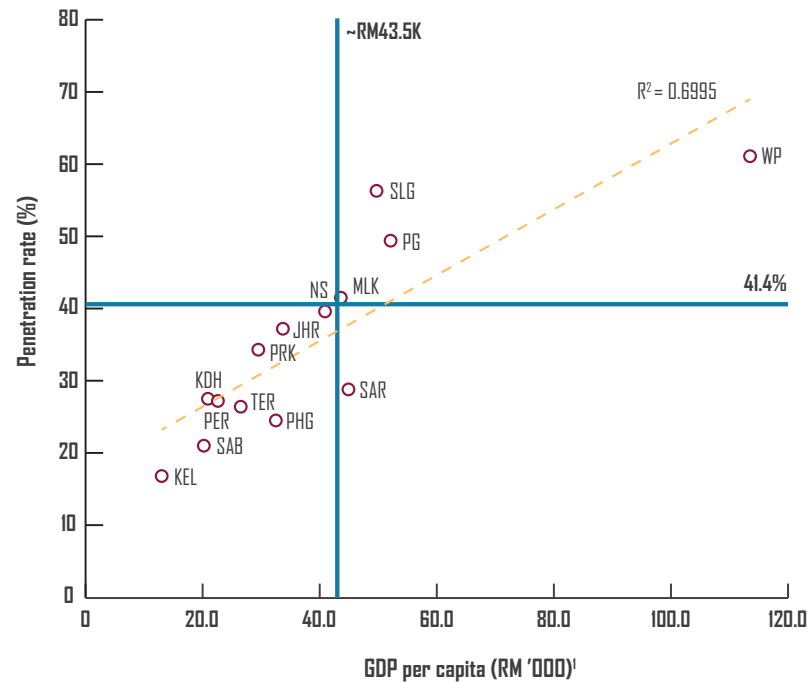
Legend:
FBB: Fixed-broadband
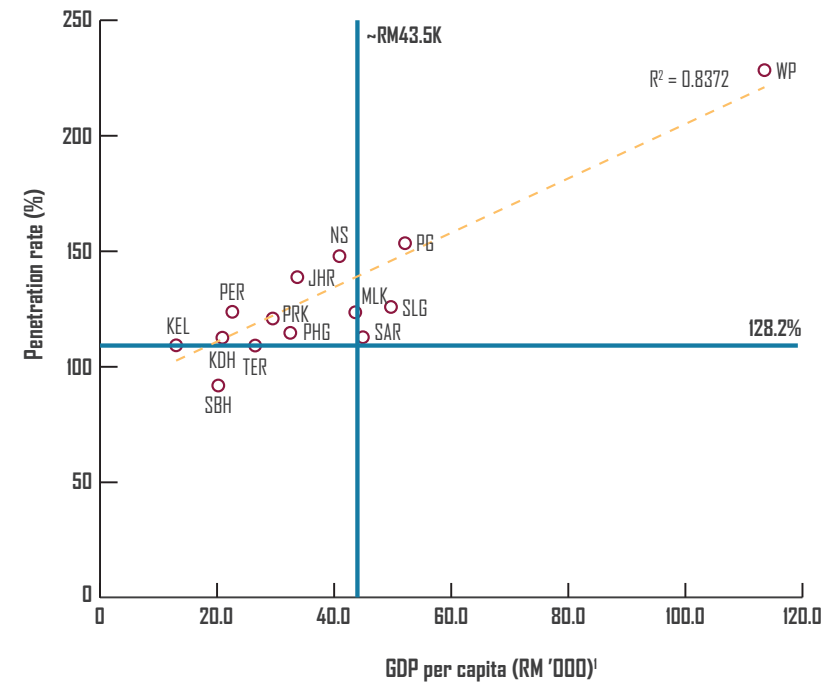MBB: Mobile-broadband

Note:
1. Fixed-broadband refers to penetration rate per 100 premises
2. Mobile-broadband refers to penetration rate per 100 inhabitants

Broadband penetration rates vs GDP per capita

Fixed-broadband penetration rate vs GDP per capita

~RM43.5K

$R^2 = 0.6995$

WP

SLG

PG

NS · MLK

JHR

PRK

KDH

PER · TER · PHG

SAB

KEL

SAR

41.4%

Penetration rate (%)

GDP per capita (RM '000)[1]

Mobile-broadband penetration rate vs GDP per capita

~RM43.5K

$R^2 = 0.8372$

WP

NS · PG

JHR

PER · PRK · MLK · SLG

KEL · PHG · SAR

KDH · TER

SBH

128.2%

Penetration rate (%)

GDP per capita (RM '000)[1]

- Malaysians are primarily connected to the internet via mobile broadband services (mobile-broadband penetration rate exceeding 100 percent in all states except Sabah). However, fixed-broadband service coverage and adoption are still lagging, particularly in states with lower GDP per capita than the national average.
- High-income states such as Selangor and Pulau Pinang recorded higher broadband adoption (both fixed and mobile) since they have among the best broadband coverage and demand compared to other states.
- Therefore, continuous support from state governments and service providers to facilitate the implementation of JENDELA projects will help the states with lower performance expand their broadband infrastructure.
- As a result, the expansion of broadband infrastructure within those states can further drive digital economy growth, contributing to higher per capita income.

Note:
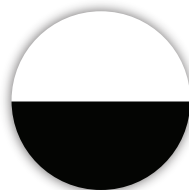1. Source: Department of Statistics Malaysia (DOSM), Gross Domestic Product (GDP) per capita by state as at 2020
2. Blue solid lines indicate national figures and yellow dashed lines indicate line of best fit
3. R^2 refers to coefficient of determination

Broadband subscriptions by state ('000)

Johor
FBB: 447.1
MBB: 5,275.4

Pahang
FBB: 98.6
MBB: 1,940.2

Sarawak
FBB: 213.1
MBB: 3,197.2

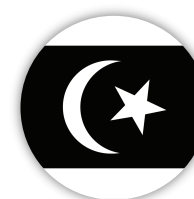**Kedah**
FBB: 156.3
MBB: 2,481.3

Perak
FBB: 251.1
MBB: 3,042.4

Selangor
FBB: 1,259.2
MBB: 8,286.7

Kelantan
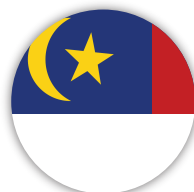FBB: 66.1
MBB: 2,118.2

Perlis
FBB: 18.2
MBB: 316.8

Terengganu
FBB: 75.4
MBB: 1,400.9

Melaka
FBB: 118.9
MBB: 1,164.1

Pulau Pinang
FBB: 280.8
MBB: 2,727.2

Wilayah Persekutuan[1]
FBB: 450.0
MBB: 4,505.2

Negeri Sembilan
FBB: 132.9
MBB: 1,674.6

Sabah
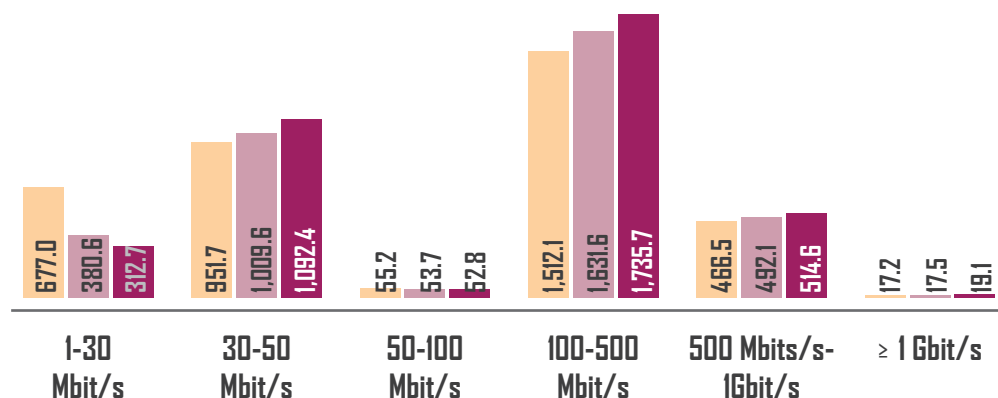FBB: 159.6
MBB: 3,527.4

Legend:
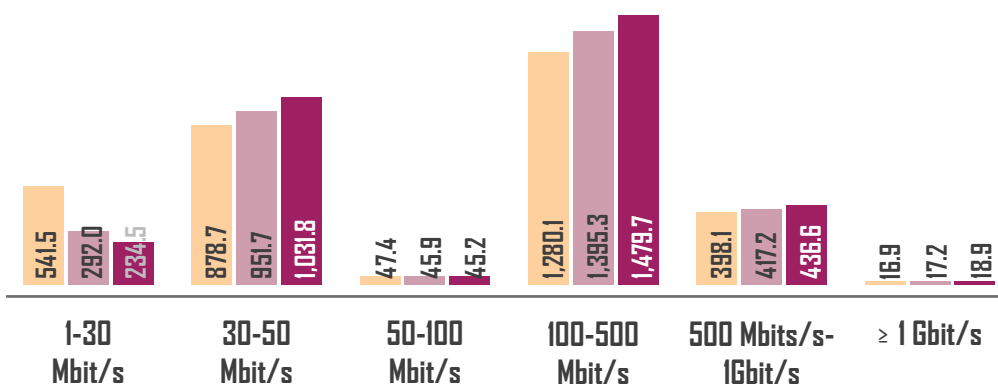FBB: Fixed-broadband
MBB: Mobile-broadband

Note:
1. Wilayah Persekutuan is inclusive of Wilayah Persekutuan Kuala Lumpur, Wilayah Persekutuan Labuan and Wilayah Persekutuan Putrajaya

Fixed-broadband subscriptions by speed range ('000)

Fixed-broadband subscriptions (Overall)

Speed range	2Q 2021	3Q 2021	4Q 2021
1-30 Mbit/s	677.0	380.6	312.7
30-50 Mbit/s	951.7	1,009.6	1,092.4
50-100 Mbit/s	55.2	53.7	52.8
100-500 Mbit/s	1,512.1	1,631.6	1,735.7
500 Mbits/s-1Gbit/s	466.5	492.1	514.6
≥ 1 Gbit/s	17.2	17.5	19.1

Fixed-broadband subscriptions (Household)

Speed range	2Q 2021	3Q 2021	4Q 2021
1-30 Mbit/s	541.5	292.0	234.5
30-50 Mbit/s	878.7	951.7	1,031.8
50-100 Mbit/s	47.4	45.9	45.2
100-500 Mbit/s	1,280.1	1,395.3	1,479.7
500 Mbits/s-1Gbit/s	398.1	417.2	436.6
≥ 1 Gbit/s	16.9	17.2	18.9

Legend: 2Q 2021, 3Q 2021, 4Q 2021

4G mobile subscriptions ('000)

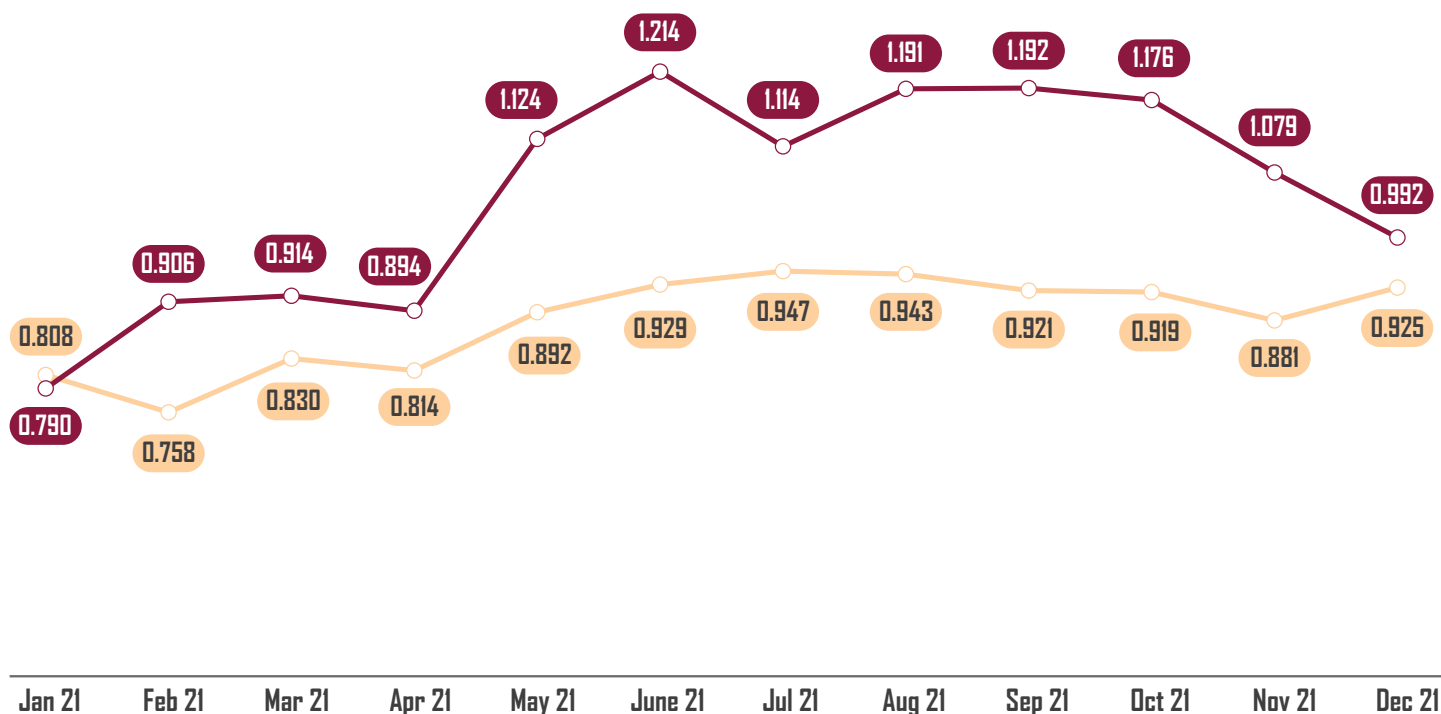|	2Q 2021	3Q 2021	4Q 2021
4G mobile subscriptions	38,163.4	39,431.5	40,876.3
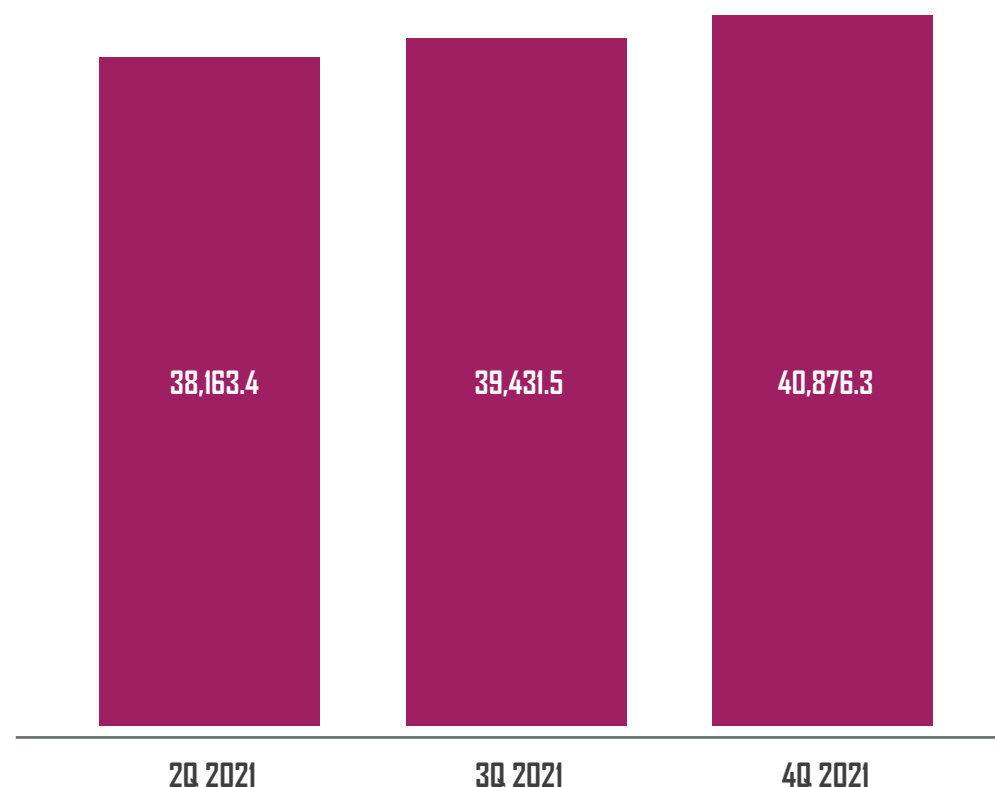
Note:
1. Each speed range includes the lower bound speed

Broadband traffic (exabytes)
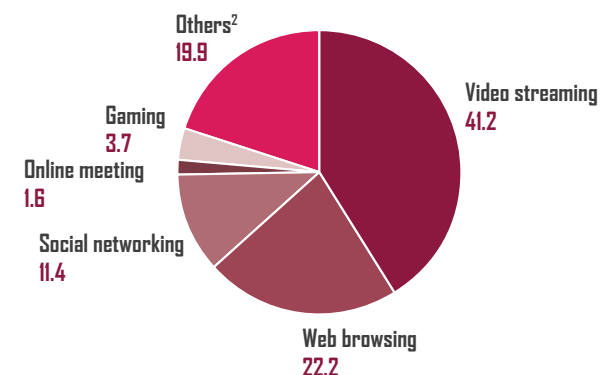
Total broadband traffic:
FBB: **12.586**
MBB: **10.568**
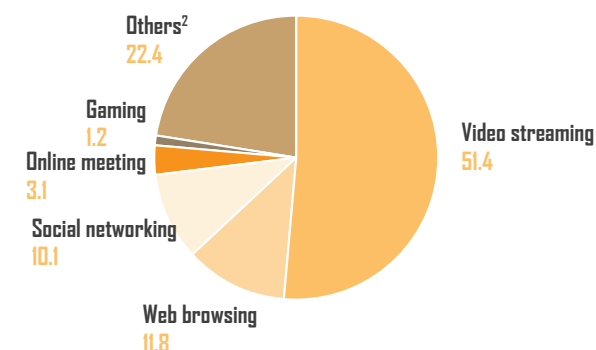

Fixed-broadband traffic (dark red line):
- Jan 21: 0.790
- Feb 21: 0.906
- Mar 21: 0.914
- Apr 21: 0.894
- May 21: 1.124
- June 21: 1.214
- Jul 21: 1.114
- Aug 21: 1.191
- Sep 21: 1.192
- Oct 21: 1.176
- Nov 21: 1.079
- Dec 21: 0.992

Mobile-broadband traffic (orange line):
- Jan 21: 0.808
- Feb 21: 0.758
- Mar 21: 0.830
- Apr 21: 0.814
- May 21: 0.892
- June 21: 0.929
- Jul 21: 0.947
- Aug 21: 0.943
- Sep 21: 0.921
- Oct 21: 0.919
- Nov 21: 0.881
- Dec 21: 0.925

Legend: ■ Fixed-broadband traffic ■ Mobile-broadband traffic

Fixed-broadband traffic by segment (%)

- Video streaming 41.2
- Web browsing 22.2
- Others[2] 19.9
- Social networking 11.4
- Gaming 3.7
- Online meeting 1.6

Mobile-broadband traffic by segment (%)

- Video streaming 51.4
- Others[2] 22.4
- Web browsing 11.8
- Social networking 10.1
- Online meeting 3.1
- Gaming 1.2

Note:
1. 1 Exabyte = 1,000,000,000 Gigabyte
2. Others refers to other traffic that excludes services namely video streaming, web browsing, social networking, online meeting and gaming

Mobile-cellular

Postpaid subscriptions ('000)

14,178.6
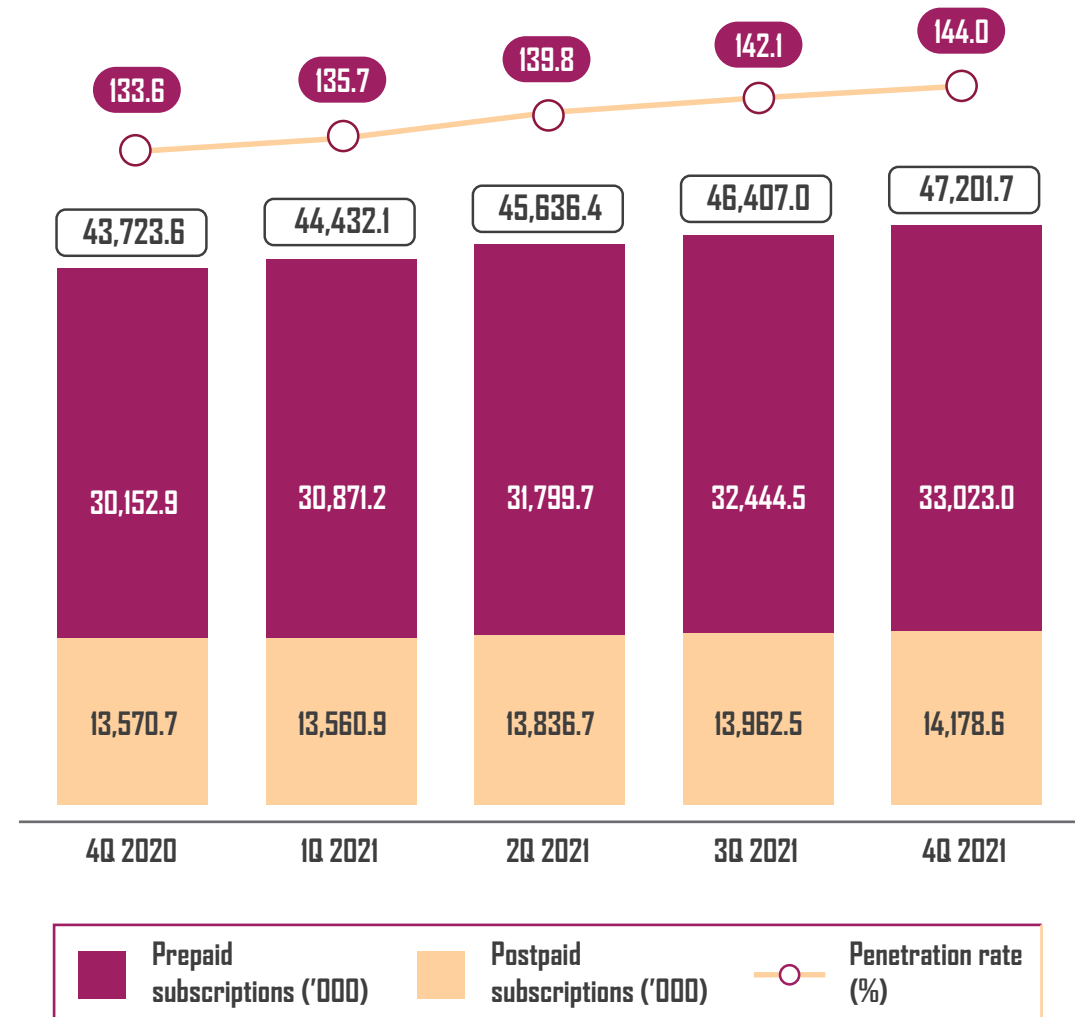## 3Q 2021: 13,962.5

Prepaid subscriptions ('000)

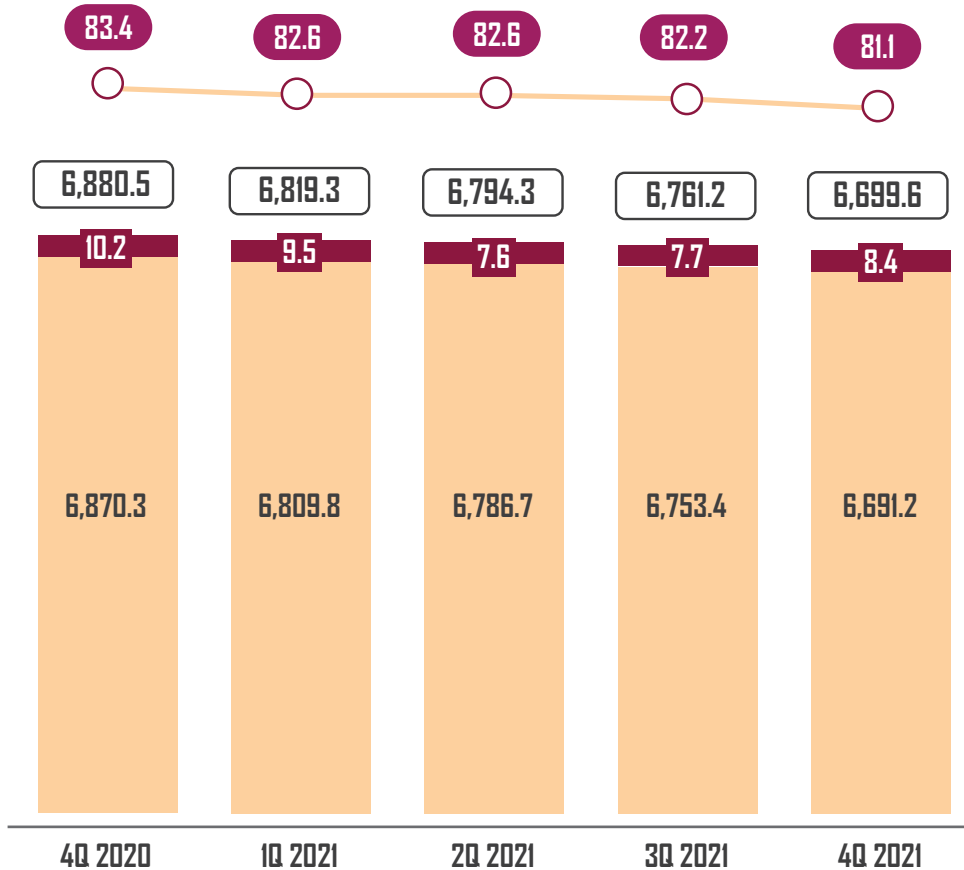# 33,023.0
3Q 2021: 32,444.5

Total SMS (million)

710.5
3Q 2021: 734.2
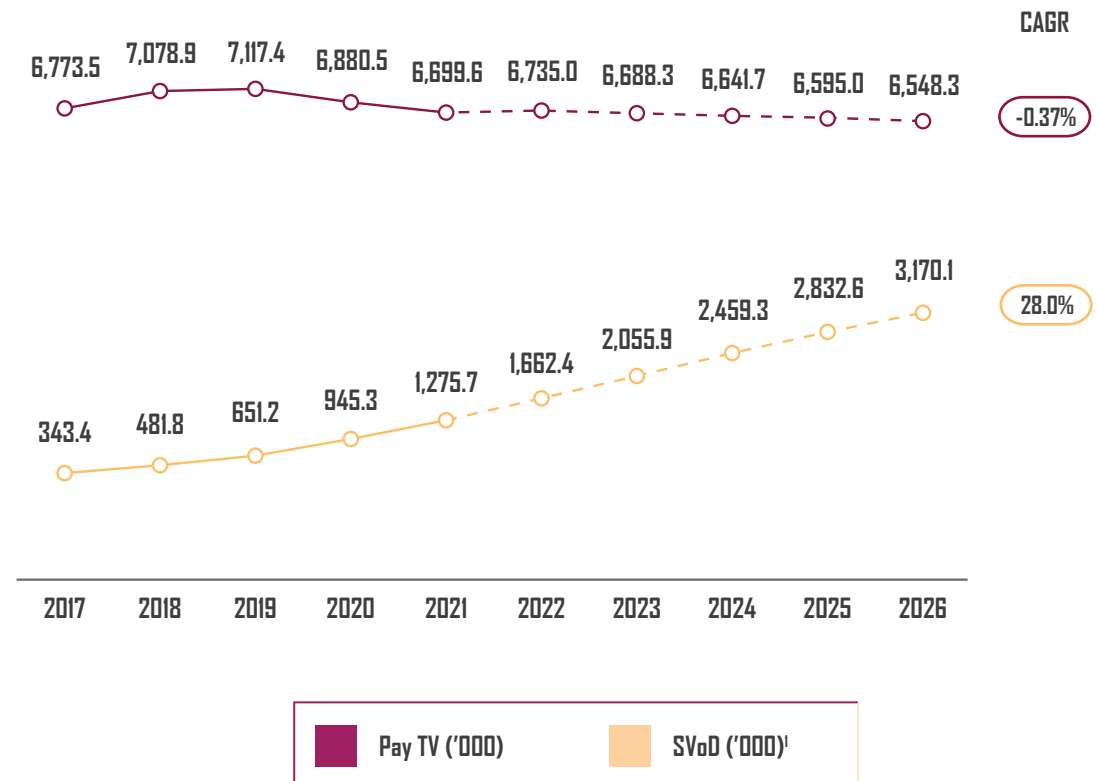
Subscriptions and penetration rate per 100 inhabitants

	4Q 2020	1Q 2021	2Q 2021	3Q 2021	4Q 2021
Penetration rate (%)	133.6	135.7	139.8	142.1	144.0
Total subscriptions ('000)	43,723.6	44,432.1	45,636.4	46,407.0	47,201.7
Prepaid subscriptions ('000)	30,152.9	30,871.2	31,799.7	32,444.5	33,023.0
Postpaid subscriptions ('000)	13,570.7	13,560.9	13,836.7	13,962.5	14,178.6

Legend:
- Prepaid subscriptions ('000)
- Postpaid subscriptions ('000)
- Penetration rate (%)

Pay TV

Subscriptions and penetration rate per 100 households

Penetration rate (%):
- 4Q 2020: **83.4**
- 1Q 2021: **82.6**
- 2Q 2021: **82.6**
- 3Q 2021: **82.2**
- 4Q 2021: **81.1**

Total:
- 4Q 2020: 6,880.5
- 1Q 2021: 6,819.3
- 2Q 2021: 6,794.3
- 3Q 2021: 6,761.2
- 4Q 2021: 6,699.6

Non-households ('000):
- 4Q 2020: 10.2
- 1Q 2021: 9.5
- 2Q 2021: 7.6
- 3Q 2021: 7.7
- 4Q 2021: 8.4

Households ('000):
- 4Q 2020: 6,870.3
- 1Q 2021: 6,809.8
- 2Q 2021: 6,786.7
- 3Q 2021: 6,753.4
- 4Q 2021: 6,691.2

Legend:
- Non-households ('000)
- Households ('000)
- Penetration rate (%)

Subscriptions of pay TV and video on demand (SVoD) forecast (2017 - 2026)

Pay TV ('000):
- 2017: 6,773.5
- 2018: 7,078.9
- 2019: 7,117.4
- 2020: 6,880.5
- 2021: 6,699.6
- 2022: 6,735.0
- 2023: 6,688.3
- 2024: 6,641.7
- 2025: 6,595.0
- 2026: 6,548.3

CAGR: **-0.37%**

SVoD ('000):
- 2017: 343.4
- 2018: 481.8
- 2019: 651.2
- 2020: 945.3
- 2021: 1,275.7
- 2022: 1,662.4
- 2023: 2,055.9
- 2024: 2,459.3
- 2025: 2,832.6
- 2026: 3,170.1

CAGR: **28.0%**

Legend:
- Pay TV ('000)
- SVoD ('000)[1]

Notes:
1. Source: GlobalData, 9 November 2021 – Malaysia Subscription Video On Demand (SVoD) Forecast
2. Subscriptions Video on Demand (SVoD) refer to paid subscriptions for video streaming over the Internet. Also known as OTT video
3. Solid lines indicate actual figures and dashed lines indicate forecasted figures
4. CAGR refers to Compoud Annual Growth Rate

Digital Signature

Number of certificates issued by type ('000)

	4Q 2020	1Q 2021	2Q 2021	3Q 2021	4Q 2021
Total	15,486.1	15,935.1	16,569.8	16,804.4	16,911.3
Others[1]	54.6	54.6	54.6	55.4	57.3
Local - Corporate	533.5	566.5	592.7	622.7	646.0
Local - Government	14,898.1	15,314.0	15,922.5	16,126.3	16,208.0

Legend: Local - Government | Local - Corporate | Others[1]
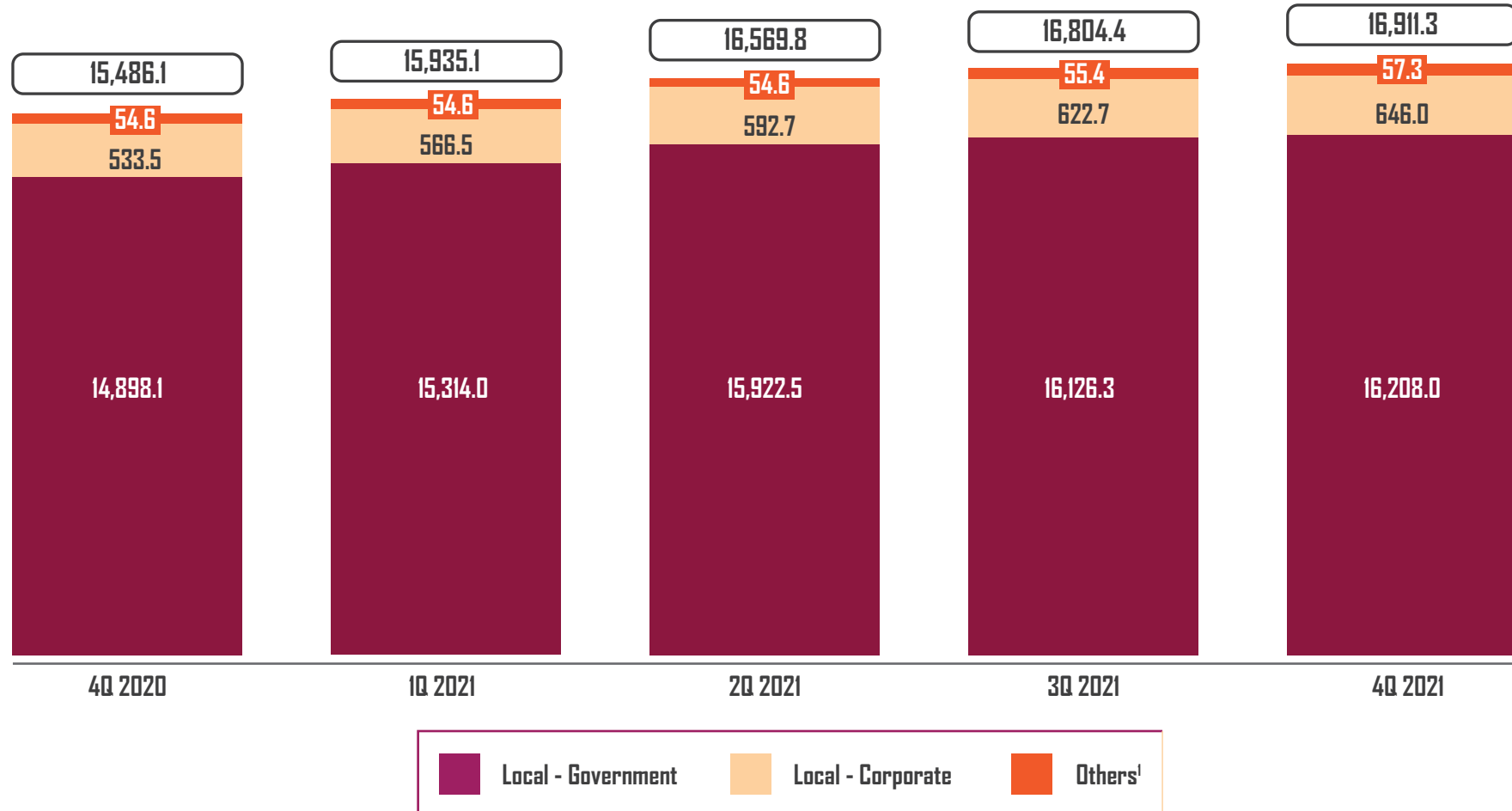
Note:
1. Others includes Local - Individual, Foreign - Corporate, and Foreign - Government

MCMC