

# Q1 2022 REPORT

29 April 2022



## JENDELA THE PROGRESS

After 18 months of implementation, Jalinan Digital Negara (JENDELA) is well into the last leg of Phase 1 ending 31 December 2022. The national digital infrastructure plan saw the key stakeholders – the regulator, industry players and pertinent government agencies or bodies – working cooperatively since late-2020 to expand existing 4G coverage to 100% of populated areas, increase mobile broadband speed to 100 Mbps, and fiberise nine (9) million premises by end of 2025.

By the end of first quarter of 2022 (Q1 2022), the industry has accumulatively fiberised 2,070,565 premises, upgraded 32,391 base stations, and constructed 1,249 new mobile towers nationwide. These concerted efforts are geared towards optimising existing resources to provide Malaysians with widespread quality broadband coverage and experience as well as facilitating the rollout of 5G network services, which has been accelerated from Phase 2 to Phase 1.

After 18 months of implementation, JENDELA is well into the last leg of Phase 1 ending 31 December 2022





# JENDELA JOURNEY

Since its implementation in September 2020, JENDELA has been confronted with a multitude of challenges contributed by the COVID-19 pandemic, restrictions and natural disasters such as the devastating floods and monsoon season.

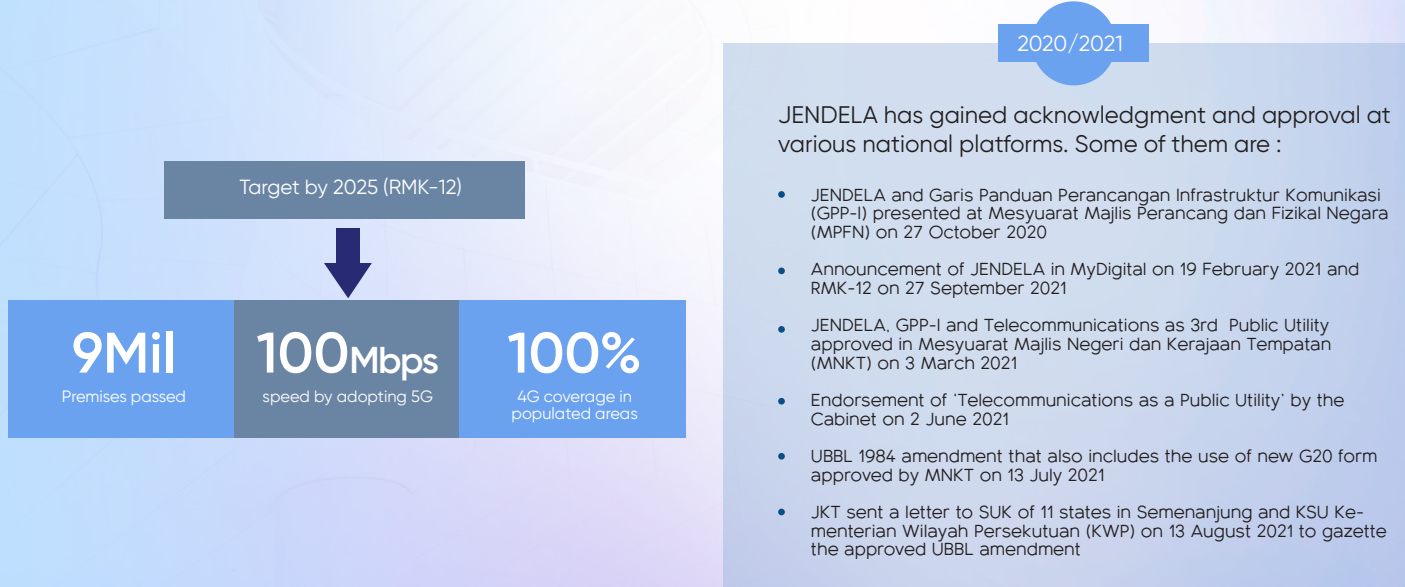
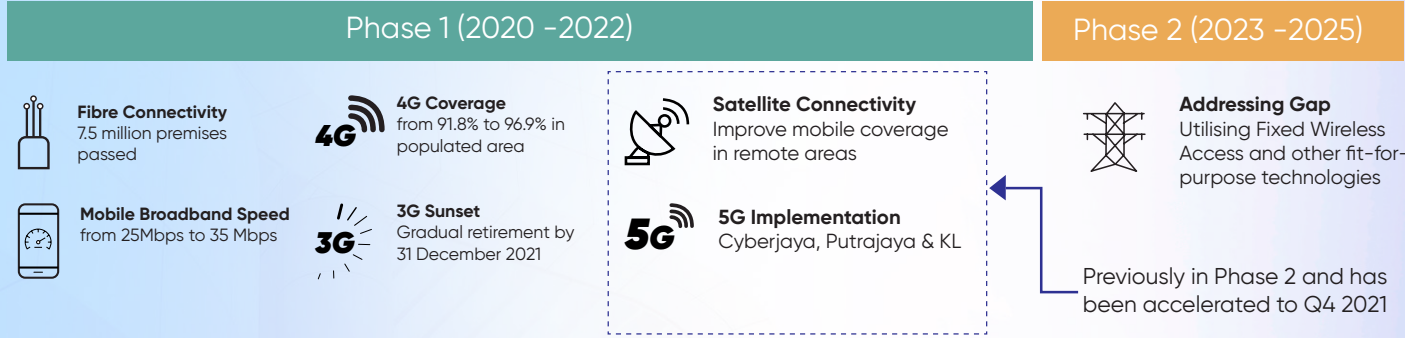
Nevertheless, JENDELA continues to receive overwhelming support and acknowledgment from the industry players, federal and state government authorities, media, and the analysts' community. Some of the key achievements include the adoption and announcement of JENDELA in the MyDigital national blueprint, federal recognition of telecommunications as a public utility, and the adoption of *Garis Panduan Perancangan Infrastruktur Komunikasi* (GPP-I) and Uniform Building By-Laws (UBBL) as standard by the respective state authorities.

Satellite connectivity improving mobile coverage in remote areas, as well as 5G implementation in Cyberjaya, Putrajaya and Kuala Lumpur, which were previously planned for Phase 2 have been accelerated to Q4 2021.

These achievements clearly demonstrated the commitment of the Malaysian government, through MCMC, to transform Malaysia into a high-income, high-technology digital nation by 2025.



## JENDELA Journey





## JENDELA PHASE 1 ACTION PLANS

JENDELA targets to complete the construction of 1,661 new 4G mobile sites and fiberisation of 929,631 premises by the end of 2022. As of 31 March 2022, there are only 473,000 premises to be fiberised while all the identified locations for the new sites are undergoing site inspections or surveys. 798 out of the 839 identified rural and interior locations are now provided with satellite broadband access.



### JENDELA Phase 1 Action Plans (2020 – 2022)



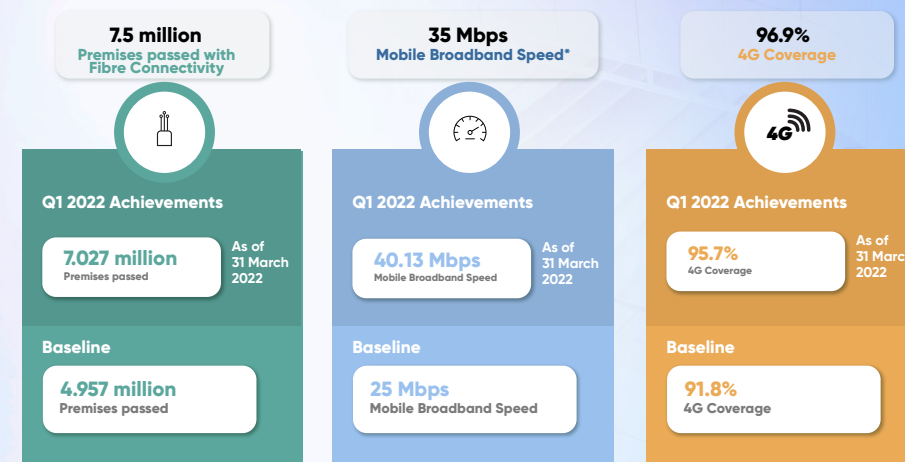


## JENDELA PHASE 1 OVERALL PERFORMANCE

As of 31 March 2022, a total of 7.027 million premises now have access to fibre broadband while 95.52% of all populated areas now have access to the 4G network despite the anticipated challenges such as geographical conditions. The average mobile broadband speed has also increased to 40.13 Mbps, surpassing the original Phase 1 target of 35 Mbps.



### JENDELA Phase 1 Target (end of 2022)



\* Based on monthly data from Ookla

## OVERALL DIGITAL INFRASTRUCTURE PERFORMANCE

The support provided by the industry players and local stakeholders enabled JENDELA to continuously achieve and exceed its overall targets. Jointly, the service providers have fiberised 179,666 premises, upgraded 2,217 base stations to 4G technology, and built 60 new 4G towers in just three (3) months, from January – March 2022.



**FIXED BROADBAND**  
Premises passed with Fibre Connectivity



**MOBILE BROADBAND**  
Base Station Upgrades to 4G Technology



**New 4G Towers**

### Overall Digital Infrastructure Performance

2020 (Sept - Dec 2020)	2021 (Jan - Dec 2021)	2022 (Jan - March 2022)	TOTAL (Sep 2020 - Mar 2022)
<b>456,757</b> 129.7%	Target: 352,101 <b>1,434,142</b> 115.2%	Target 2021: 1,245,452 <b>179,666</b> 105.7%	Target Q1 2022: 170,017 <b>2,070,565</b> Premises Passed
<b>16,367</b> 100.9%	Target: 16,214 <b>13,807</b> 110.5%	Target 2021: 12,499 <b>2,217</b> 89%	Target Q1 2022: 2,491 <b>32,391</b> Base Stations Upgraded
<b>939</b> 99.9%	Target: 940 <b>250</b> 129.5%	Target 2021: 193 <b>60</b> 100%	Target Q1 2022: 60 <b>1,249</b> New Towers

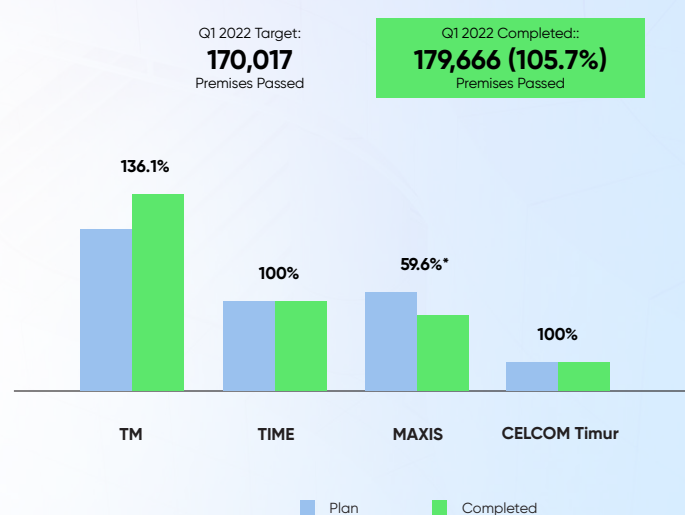


## PERFORMANCE FOR PREMISES PASSED

Of the 179,666 premises passed, or 105.7% of its original target of 170,017, Telekom Malaysia (TM) passed more than 100,000 premises – making it the biggest contributor to the initiative – followed by TIME and Celcom.

Shortage in manpower and raw materials required for pole fabrication resulted in Maxis achieving only 59.6% of its target, however the percentage of the shortfall is insignificant to the industry's total contribution for the premises passed.

### Summary of Service Providers' Performance for Premises Passed with Fibre Connectivity (Jan – Mar 2022)



\* Maxis shortfall is due to:

- Shortage of poles due to lack of manpower as the manufacturers are unable to get foreign worker permits
- Shortage of raw materials for pole fabrication
- Permitting lead time by state agencies (Pahang, Johor and Melaka) related to OSA

## PERFORMANCE FOR 4G TOWERS

The four (4) main mobile broadband service providers have collectively built 60 new 4G towers, with Celcom completing 25% more than its pre-set target.

Digi, despite encountering permit approval issues with the Sabah Local Council, managed to complete 94% of its target.

### Summary of Service Providers' Performance for New 4G Towers (Jan – Mar 2022)



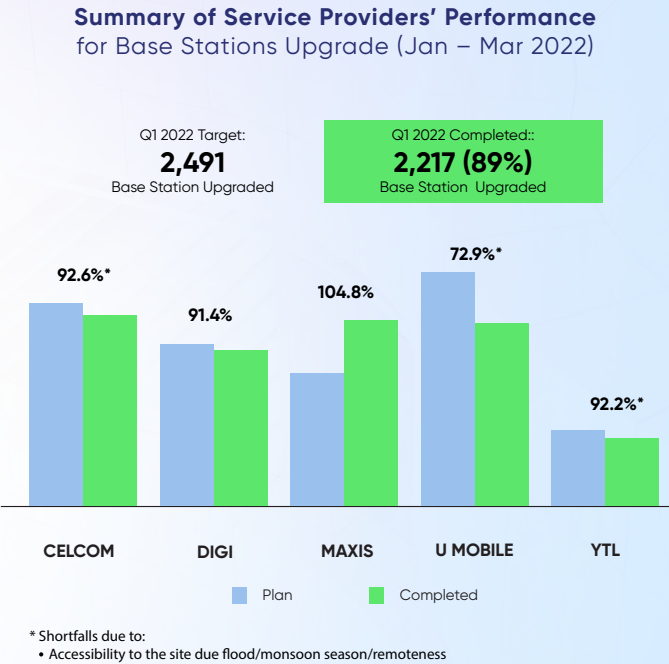
\* Digi's shortfall is due to permit approval from Sabah Local Council (BOMBA and CAAM)

## PERFORMANCE FOR BASE STATIONS UPGRADE

Base stations upgrade saw a shortfall in the overall targets mainly due to inaccessibility to selected sites affected by floods and monsoon season.

However, the service providers have upgraded 2,217 base stations, or 89% of the original target of 2,491, with Maxis successfully exceeding its targets by 4.8%.

Nevertheless, the industry is optimistic to catch up with the small shortfall by subsequent quarters.



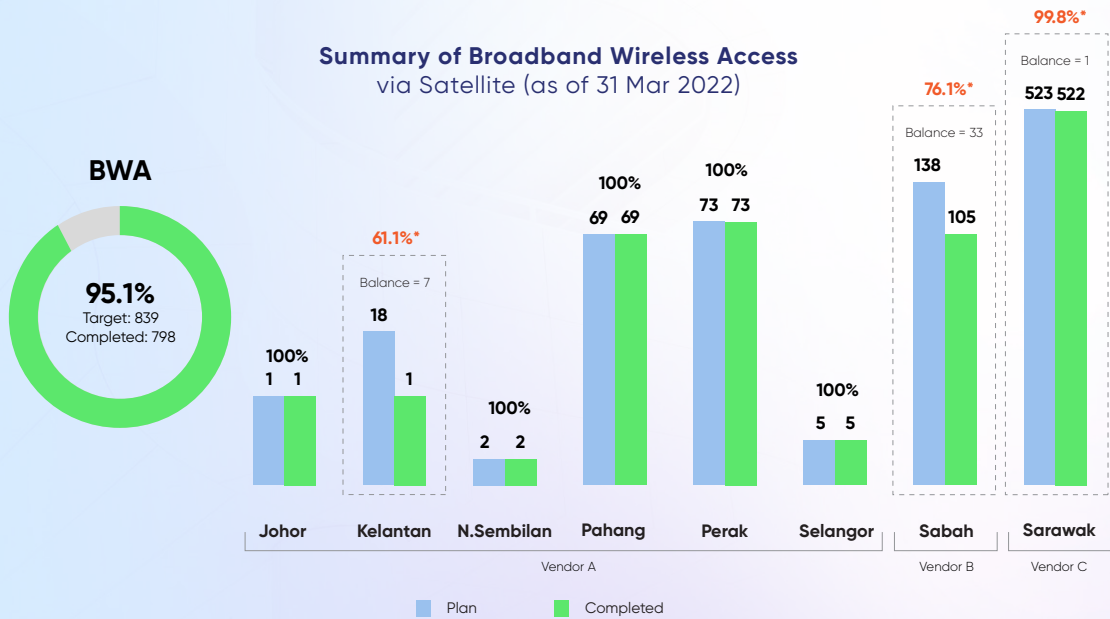
## ACCESS VIA SATELLITE

Satellite broadband is a necessary component of JENDELA to provide reliable connectivity in remote locations and interior areas that are difficult to access. A total of 798 locations (or 95.1% of the initial target) across Johor, Negeri Sembilan, Pahang, Perak, and Selangor are now equipped with wireless access via this method.

Inaccessibility to *Orang Asli* settlement due to road closure

caused by the floods and monsoon season, and challenges in locating the settlement due to *Orang Asli*'s nomadic lifestyle have added to the delay in the deployment progress in Kelantan (61.1%), Sabah (76.1%) and Sarawak (99.8%).

MCMC and the industry are working towards completing the remaining 33 sites in Sabah by 30 April 2022 and 8 sites in Kelantan and Sarawak by 31 May 2022, barring unforeseen circumstances.



Note:

1- Accessibility issue to Kampung *Orang Asli* because of flood, monsoon season and road closure

2- All sites in Sabah are expected to complete by 30 April 2022

3- 8 sites in Kelantan and Sarawak to complete by 31 May 2022



## ADDRESSING ISSUES AND CHALLENGES

On the policy coordination front, the regulator worked with the Ministry of Communications and Multimedia (K-KOMM) in drafting a Cabinet Ministers' memorandum to facilitate the digital infrastructure development permit fee approval process, and target to circulate it to the relevant ministries at the end of April 2022.

Separately, authorities of all states are still in the midst of reviewing the UBBL amendments as of 31 March 2022.

### Addressing Issues and Challenges Through Policy Coordination at State Level

- Recognition of communication infrastructure as the third public utility ✓
- Adoption of Garis Panduan Perancangan Infrastruktur (GPP-I) at State ✓
- Communication Infrastructure Permit Management (CIPM) system to monitor the status of communication structure permit ✓
- Establishment of Majlis Digital Negeri or Jawatankuasa Infrastruktur Negeri to facilitate issues on the communication infrastructure development ✓
- Memorandum Jemaah Menteri on 'Facilitation of Permit Fee for The Digital Infrastructure Development Approval Process' has been prepared by K-KOMM and target to be circulated to relevant ministries in April 2022
- As of 31 March 2022, all States are still reviewing the UBBL amendments which includes G1-G21 forms and yet to gazette the amendments



## 3G NETWORK SHUTDOWN

86.6% of 3G customers (or over 1.8 million) have since migrated to the 4G network, while the remaining 13.4% of the customers have been informed of the 3G network shutdown, however, they do not see the need for the switch over. As of the end of Q1, 2022, 99.3% of 3G carriers are shut down. The remaining 0.7% of 3G carriers, located in remote areas, are scheduled to shut down in December 2022.

The remaining 13.4% of the customers have been informed of the 3G network shutdown

### 3G Network Shutdown

Customer Migration



**1,815,314**  
No of 3G customers migrated

No of 3G customer:  
2,097,121 customers

#### Q1 2022 Achievement

**86.6%<sup>1</sup>**

customers migrated

Network Migration



**252,199**  
No of 3G carriers shut down

No of 3G carrier:  
253,860 3G carriers

**99.3%<sup>2</sup>**

3G carriers shutdown

#### Notes

1 - Based on the forecasted data. The remaining 281,807 (13.4%) customers have already been contacted/engaged. Majority are low data users which can be served with 2G.

2 - The remaining of 1,661 (0.7%) of 3G carriers to complete the shut down by Dec 2022, mostly in remote areas.



## OVERALL NETWORK COMPLAINTS

MCMC received a total of 23,803 network related complaints in a span of three (3) months, a significant decline of 56% compared to the same period in 2021 when Malaysians were confined indoors to prevent the spread of the coronavirus. The quality of 4G network services continues to be the main concern reported by users.

42% of the complaints reported by users came from Zone 1 and Zone 2 in the top 20 districts, including Kuala Lumpur, Petaling, and Johor Bahru.

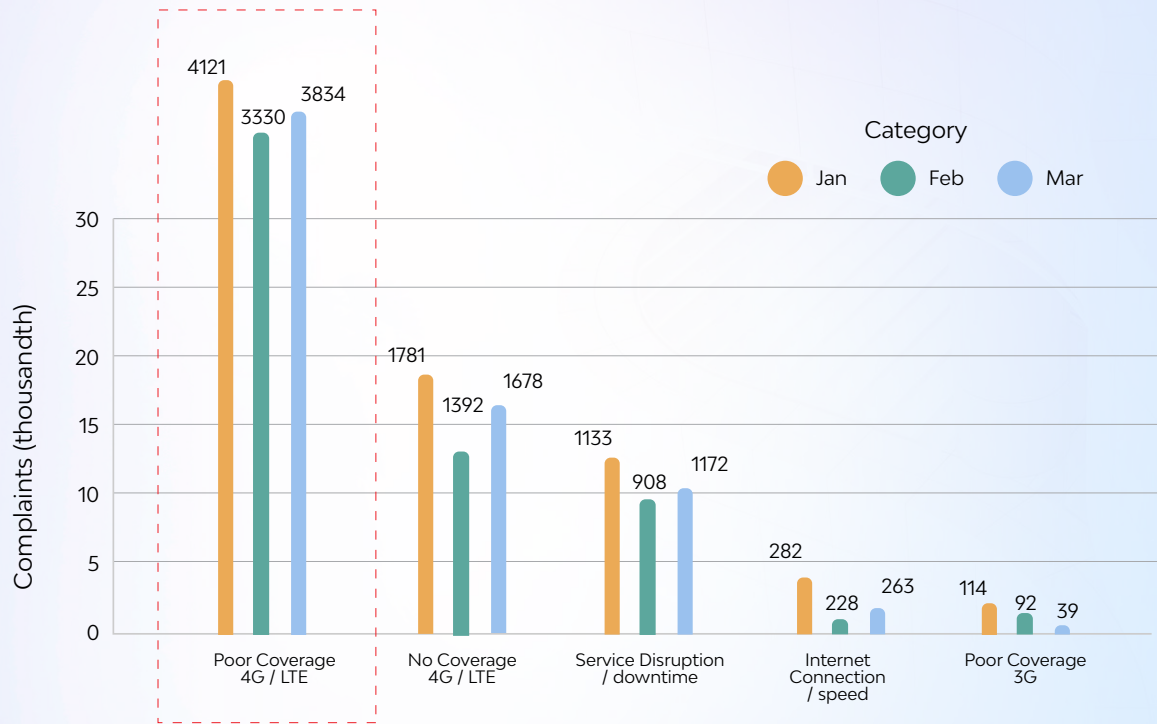
### Overall Network Complaints (Jan - Mar 2022)

As of 31 March 2022:  
MCMC recorded 23,803 network complaints since 1 January 2022



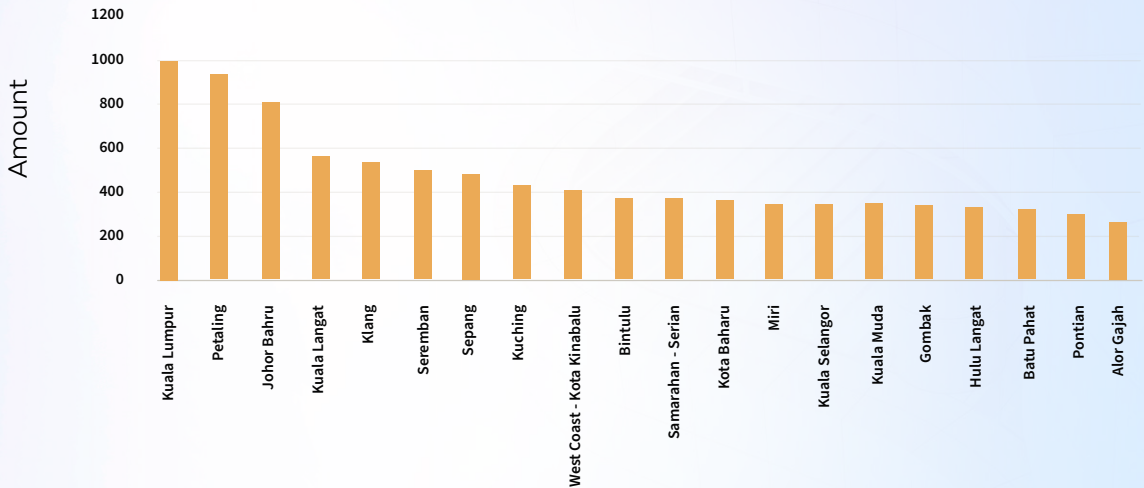
## BY CATEGORY

The complaints received were dominated by cellular services with the issue of 4G quality of services.



## BY LOCATION

From the top 20 districts, 42% of the complaints are from Zone 1 & 2





# High Profile Connectivity Issues

Between January and March 2022, MCMC and the service providers addressed five (5) high profile connectivity cases and subsequently resolved two (2) cases in Sabah and Sarawak. The construction of new mobile towers in the other three (3) locations in Kedah, Sarawak and Kelantan are expected to be completed by the end of 2022.



Kg. Mengkapon Darat,  
Pitas, Sabah

Resolved



Kg. Ulak, Limbang,  
Sarawak

Resolved

3 cases involving Kedah, Kelantan and Sarawak states are in progress to build a new tower and is expected to be completed by the end of 2022



Kg Permatang  
Kerat Telunjuk, Bandar  
Baharu, Kedah

On-Going



Kg. Wawasan, Labuan

On-Going



Kg. Batu Gajah & Kg.  
FELCRA Bukit Tandak,  
Kelantan

On-Going

Thank You





**SURUHANJAYA KOMUNIKASI DAN MULTIMEDIA MALAYSIA**  
Malaysian Communications and Multimedia Commission



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