



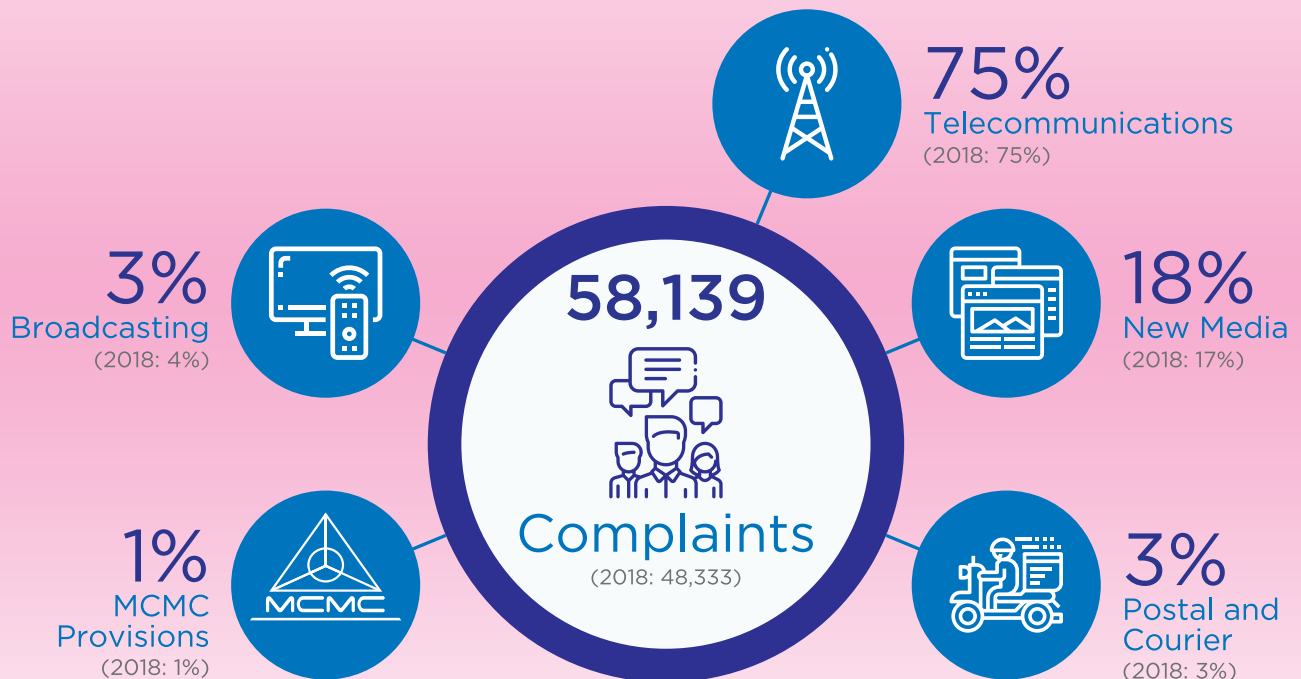
# CHAPTER 6 : QUALITY ASSURANCE AND CONSUMER PROTECTION

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This chapter is on quality assurance and consumer protection in relation to services provided under the C&M industry. It reports on the number of consumer complaints received by MCMC, detailing out the complaints handling processes and the number of resolved cases. Complaints not under MCMC purview such as online fraud/scam are also included to highlight the collaboration between MCMC and stakeholders to curb such activities. Industry Self-Regulating Forums under MCMC are also listed in this chapter, detailing their roles and activities in the C&M industry. This chapter also reports on the quality of services provided by the licensees in accordance with the Mandatory Standards for Quality of Service under the Communications and Multimedia Act 1998.

## KEY HIGHLIGHTS 2019



### Top 5 Complaints Received



#### Telecommunications

- 54% Network
- 20% Billing and Charging
- 11% SMS Service
- 9% Service Delivery
- 6% Mobile Network Portability (MNP)



#### New Media

- 41% False/Fake
- 29% Offensive
- 13% Obscene/Indecent
- 12% Defamation
- 5% Sextortion/Love Scam

### Compound



**RM2.7 million**

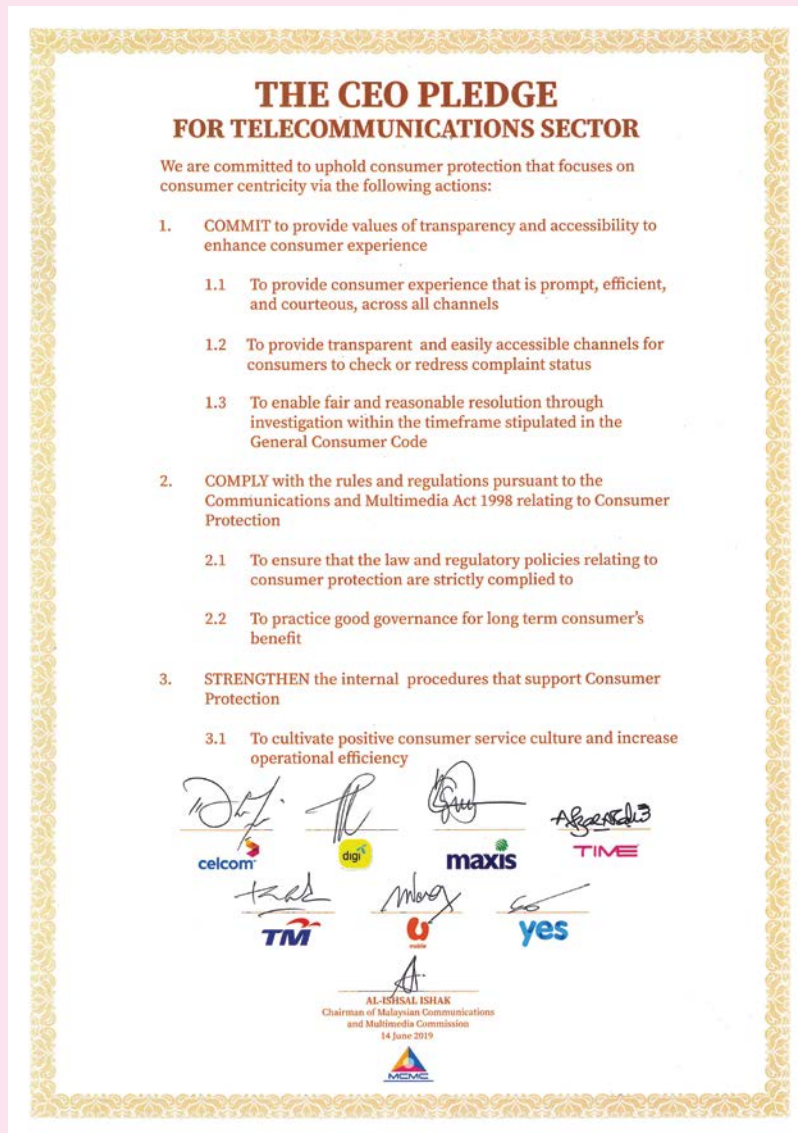
Compound issued for not complying with the Prepaid Guidelines

# CONSUMER PROTECTION AND EMPOWERMENT

## CONSUMER COMPLAINTS

Consumer protection is one of the fundamental principles under the CMA. On 14 June 2019, MCMC witnessed a CEO Pledge signing ceremony whereby major players committed to uphold a CEO pledge that focuses on consumer centricity and complaint handling management.

### THE CEO PLEDGE 2019



Source: MCMC

Figure 6.1 The CEO Pledge 2019

## COMPLAINT STATISTICS

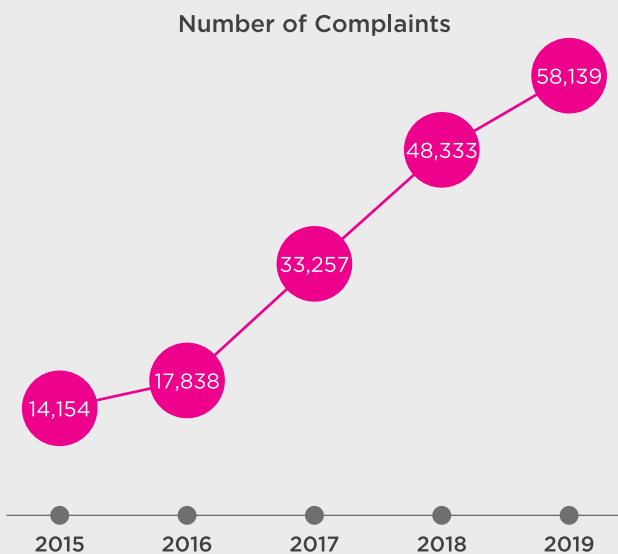
As at end 2019, MCMC received 58,139 complaints for the overall services under the C&M industry. The statistics recorded significant increase of 20% as compared to 48,333 complaints reported in the preceding year.

By industry, telecommunications services contributed 75% cases from the overall complaints reported to MCMC. The cases comprise various dissatisfaction on the level of services provided by telecommunications service providers. The second highest is new media complaints which accounted 18% grievances on social networking platform and public outcry on 3R (race, royalty and religion).



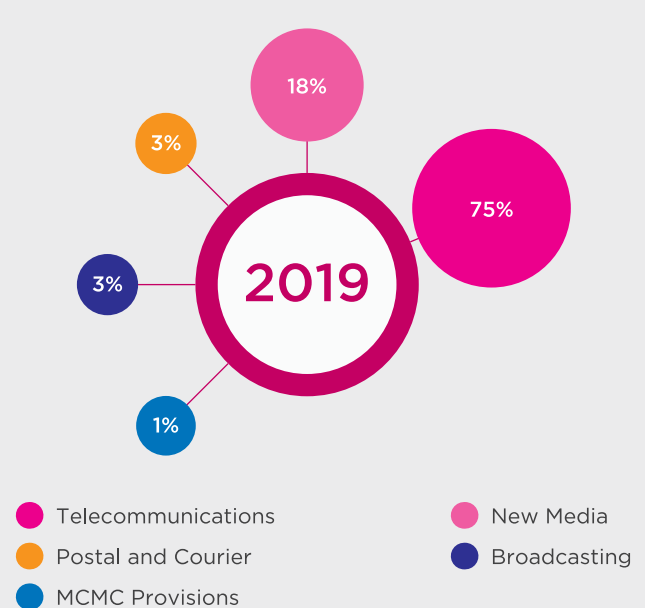
In line with technology advancement, the trend of complaints on postal/courier and broadcasting services are also on upward trend, representing 3% cases from the overall complaints reported in 2019.

### TREND OF CONSUMER COMPLAINTS RECEIVED BY MCMC 2015 - 2019



Source: MCMC  
 Figure 6.2 Trend of Consumer Complaints Received by MCMC 2015 - 2019

### COMPLAINTS BY INDUSTRY 2019

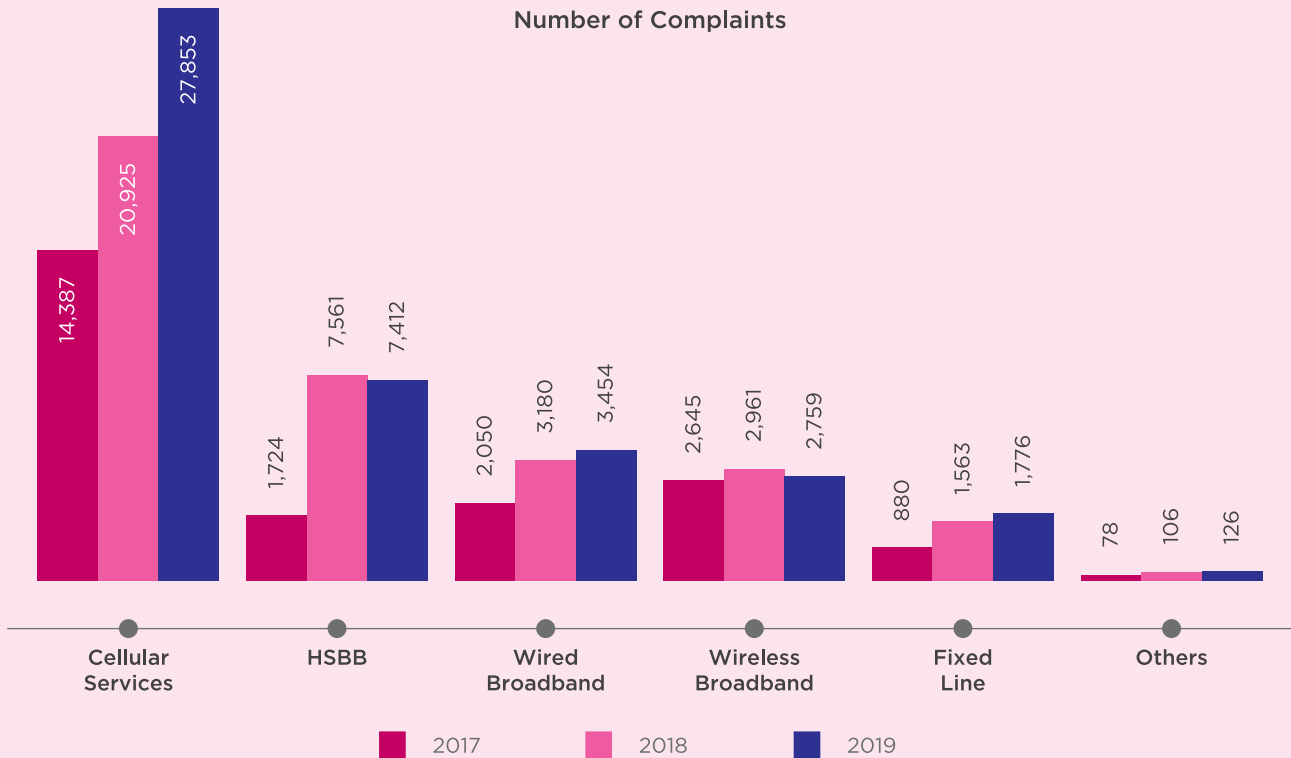


Source: MCMC  
 Figure 6.3 Complaints by Industry 2019

## COMPLAINTS ON TELECOMMUNICATIONS SECTOR

Overall, complaints on cellular services surge significantly, with 33% increase from the previous year, followed by 9% increase in wired broadband and 14% in fixed line service. Nonetheless, complaints on wireless broadband and high speed broadband (HSBB) showed a decline by 7% and 2% in 2019 from 2018 respectively.

### TYPES OF COMPLAINTS ON TELECOMMUNICATIONS SECTOR 2017 - 2019



Source: MCMC

Figure 6.4 Types of Complaints on Telecommunications Sector 2017 - 2019

The top five categories of complaints are:-

#### Network Issues

From the overall complaints reported to MCMC for telecommunications service, network issues posted the highest complaints, which represent 19,832 (54%) complaints received in 2019. Most of the issues reported are related to the quality of network service i.e. poor or service availability of HSBB and 4G LTE, service disruption/downtime, Internet connection/speed and intermittent call connection due to network congestion.

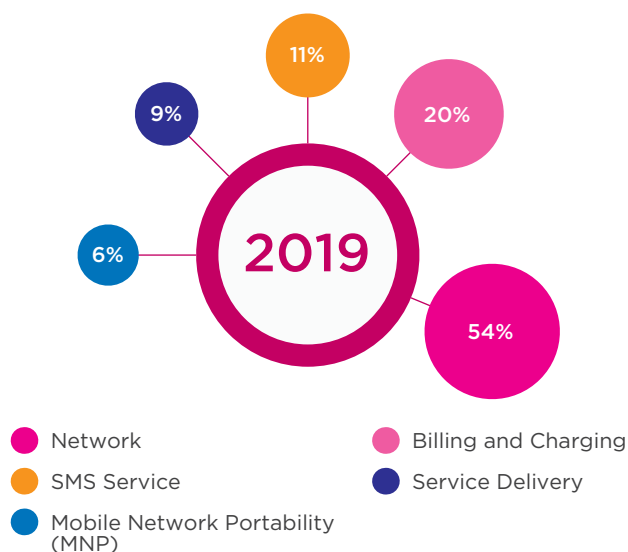
Consumer expectation is relatively high on quality of service (QoS) in which 40% of the network complaints were on QoS issues. Furthermore, consumers are more concerned on data services rather than voice services; 61% of the complaints received were on data services compared to only 19% complaints relating to voice services.

## Billing and Charging

The second highest statistics were on billing and charging which recorded 7,500 (20%) complaints from overall complaints on telecommunications sector. MCMC observes that disputes on billing issues are mostly on hidden charges and unclear terms and condition at the point of sales.

Another emerging issue is direct billing system. In 2019, a total number of 2,508 complaints reported to MCMC on unreasonable charges imposed on consumer, which were triggered by the third party application i.e. Google Play store and Apps store whereby the purchases were made via direct billing system.

### TOP 5 COMPLAINTS RECEIVED ON TELECOMMUNICATIONS SECTOR 2019



Source: MCMC

Figure 6.5 Top 5 Complaints Received on Telecommunications Sector 2019

## Short Messaging Service (SMS) Service

For SMS related complaints, consumers disputed on unknown charges imposed in their bills. It is noted that, 63% of these invalid charges were related to unsolicited SMS from short codes generated by external content providers (ECP). In addition, there are also complaints on SMS gambling, SMS scam and SMS spam from peer to peer.

## Service Delivery

It is observed that complaint on service delivery contributes to 3,476 (9%) from the overall complaint received in telecommunications sector in 2019. Consumers are mostly dissatisfied with poor customer service, misrepresentation of service by dealers and agents, debt collection agencies, late restoration and activation of services.

In most cases, frustrated complainants will seek redress direct from MCMC and the Minister via other platform i.e. social media and WhatsApp platform as they are not satisfied with how the service providers handle the complaints or resolution provided.

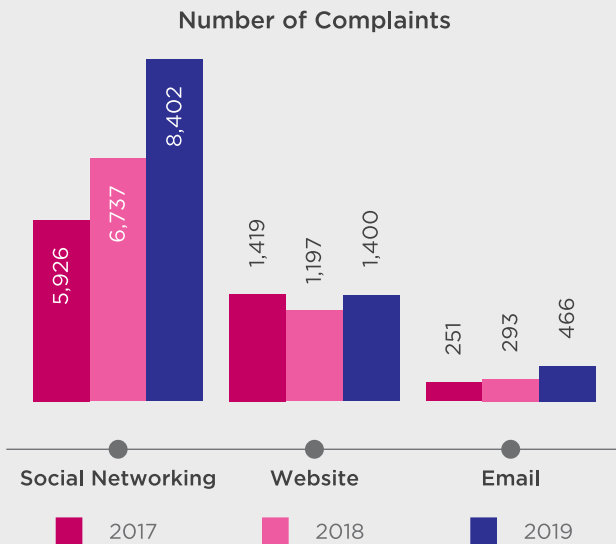
## Mobile Number Portability (MNP)

MNP provides flexibility for consumer to retain their existing mobile number and port to other service provider. In 2019, MNP related issues recorded 2,239 (6%) complaints particularly on porting delay or rejected and unauthorised porting.

## COMPLAINTS ON NEW MEDIA

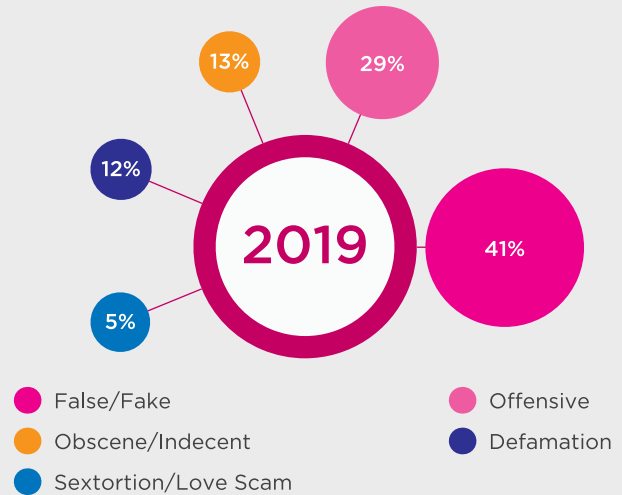
For complaints on new media, MCMC recorded 10,268 complaints from the public. The total number of complaint received in 2019 has increased by 25% as compared to 2018 (8,227). Overall, 82% or 8,402 complaints were related to social networking, followed by 14% complaints (1,400) on website/blog/forum and the remainder on email. Most of the cases reported were related to false or fake content (41%), offensive remarks (29%), obscene or indecent content (13%), defamation (12%) as well as sextortion/love scam (5%)

TYPES OF COMPLAINTS ON NEW MEDIA  
2017 - 2019



Source: MCMC  
Figure 6.6 Types of Complaints on New Media 2017 - 2019

TOP 5 COMPLAINTS RECEIVED ON  
NEW MEDIA 2019

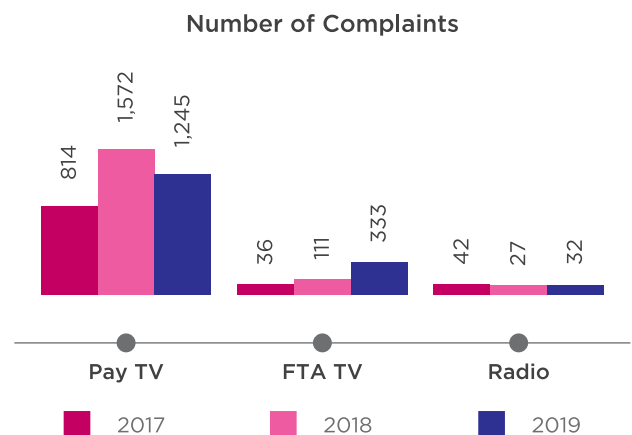


Source: MCMC  
Figure 6.7 Top 5 Complaints Received on New Media 2019

## COMPLAINTS ON BROADCASTING

Complaints related to Pay TV recorded the highest complaints in 2019 with 77% (1,245) on broadcasting services. Complaints on FTA TV increased by 200% (333), whilst complaints on radio content recorded a total of 32 cases in 2019.

TYPES OF COMPLAINTS ON BROADCASTING  
2017 - 2019



Note: Pay TV includes complaints on IPTV

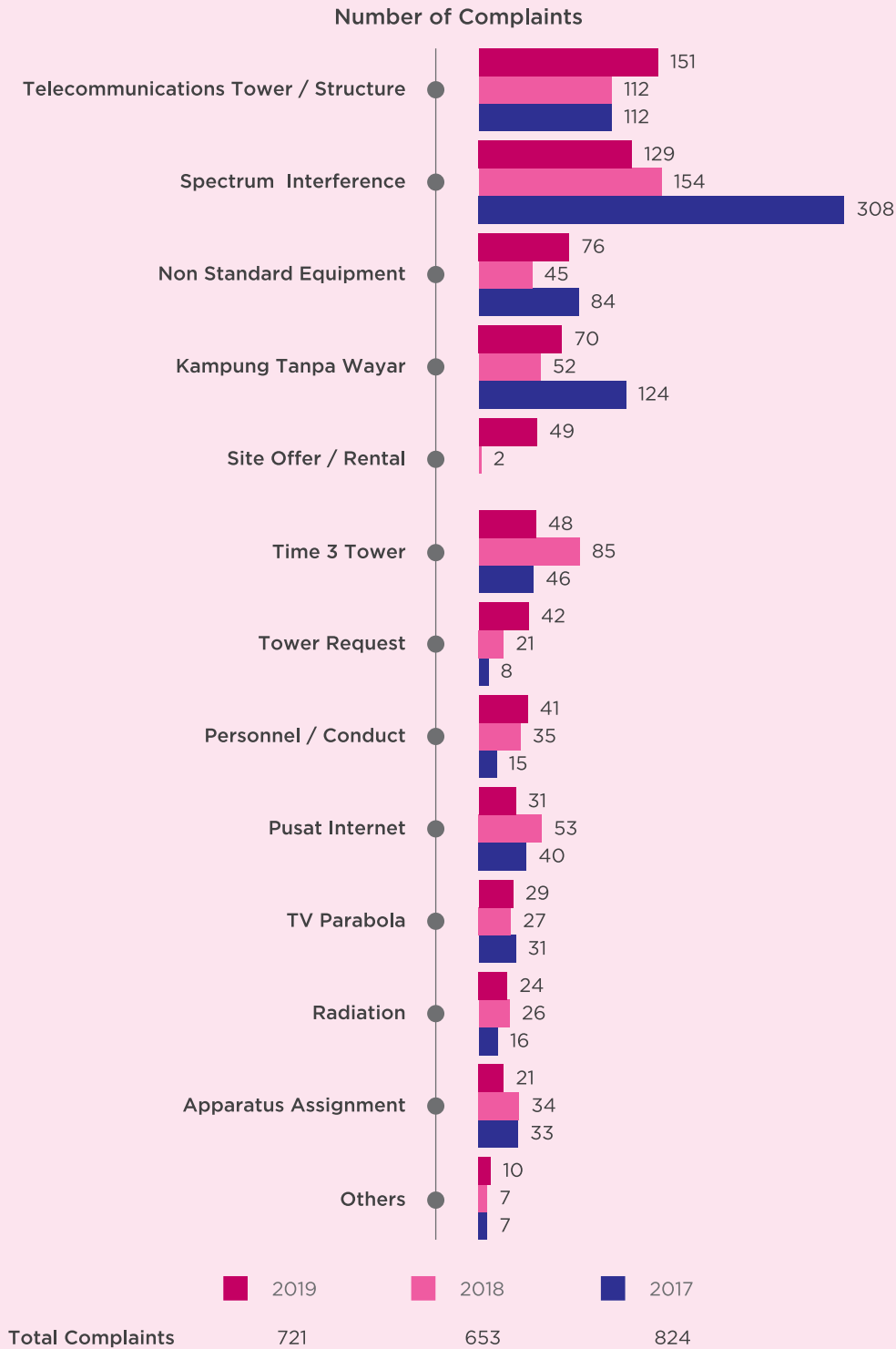
Source: MCMC  
Figure 6.8 Types of Complaint on Broadcasting 2017 - 2019



## COMPLAINTS UNDER MCMC PROVISIONS

The top three complaint categories under MCMC service provisions were on telecommunications tower/structure, spectrum interference, and non-standard equipment.

### COMPLAINTS UNDER MCMC PROVISIONS 2017 - 2019



Note: MCMC service provisions refer to the service provided by MCMC and any issue/complaint from the public will be investigated by MCMC, unlike the other complaint categories that are escalated to service providers for further action.

Source: MCMC

Figure 6.9 Complaints Under MCMC Provisions 2017 - 2019

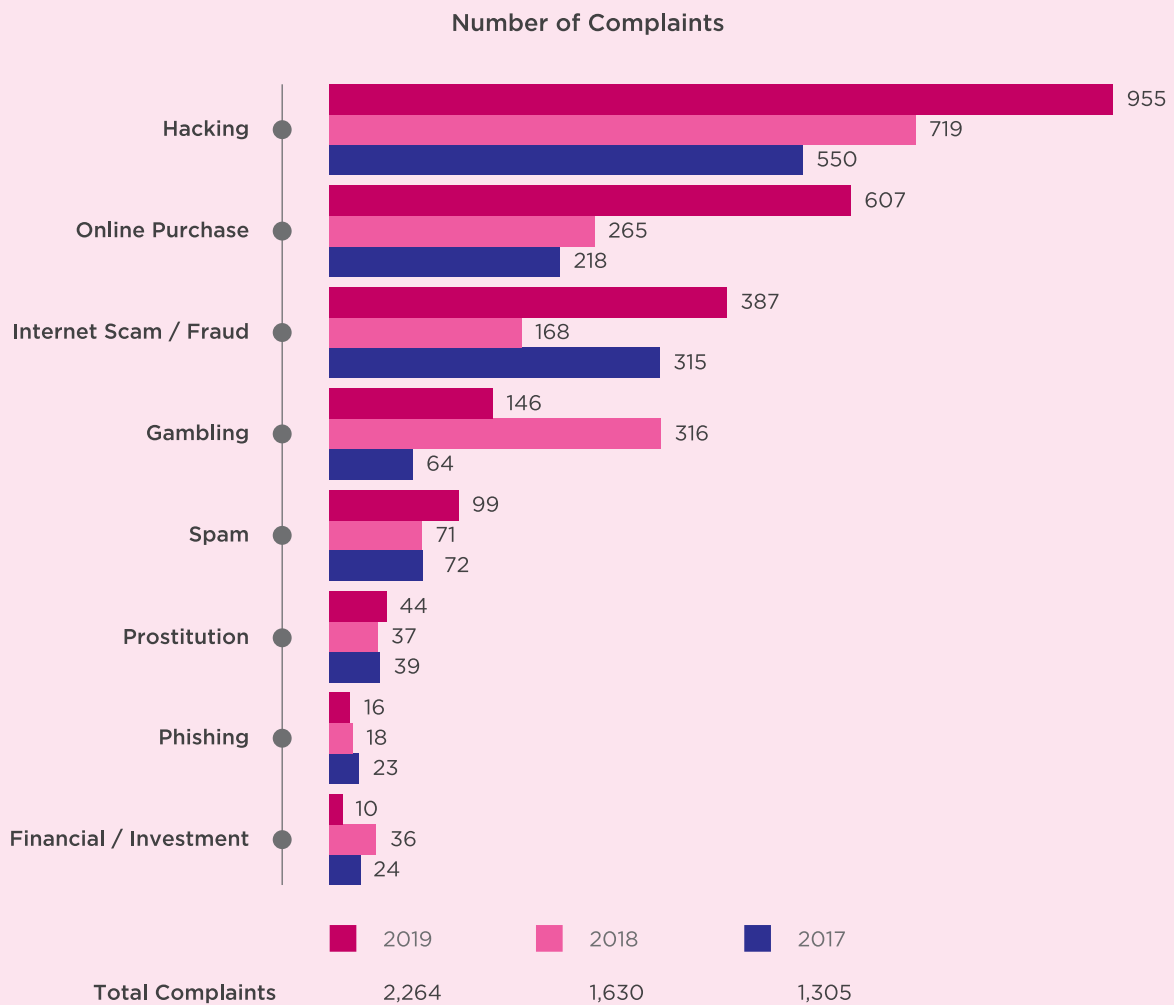
## COMPLAINTS NOT UNDER MCMC JURISDICTION

In line with the technological advancement in the cyber space, MCMC received various complaints such as hacking, online purchase, Internet fraud/scam, phishing, spam, financial investment, gambling and prostitution.

Even though these issues are not regulated directly under the CMA, MCMC provides technical assistance with strong collaboration with relevant law enforcement agencies towards eradicating such illegal activities.

In 2019, the top three complaints reported to MCMC were on hacking of social media accounts that posted the highest number of complaints with 955 complaints, followed by online purchase with 607 complaints and Internet scam or fraud with 387 complaints.

### COMPLAINTS NOT UNDER MCMC JURISDICTION 2017 - 2019



Source: MCMC

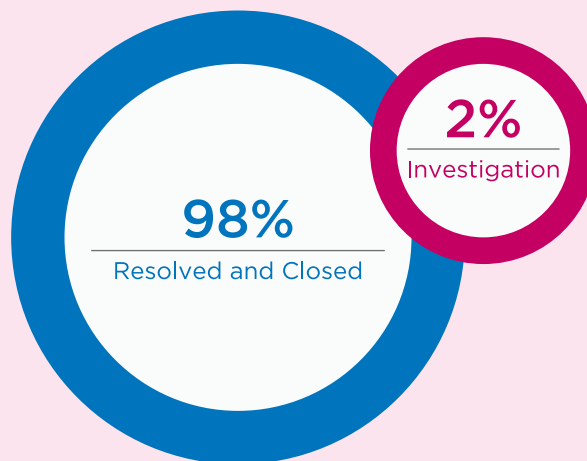
Figure 6.10 Complaints Not Under MCMC Jurisdiction 2017 - 2019

## COMPLAINT RESOLUTION

In terms of complaints lodged in 2019, 98% of the cases were closed and resolved at February 2020, whilst 2% of the cases were escalated for further investigation.

The time frame taken to resolve a complaint is between 15 to 30 days. For 'Complaints Resolved' category, the complaint has been resolved but still pending approval from complainant. The complainant is given 30 business days to provide feedback. Failure to do so, the complaint will be categorised as 'Closed'. 'Complaints under Investigation' refers to the aforesaid complaints that are still under review and investigation by MCMC and service providers.

### COMPLAINT RESOLUTION 2019



Source: MCMC

Figure 6.11 Complaint Resolution 2019

## MITIGATION OF SCAM / SPOOF CALLS

Over the past few years, consumers have been hit with number of new scams through our telecommunications services for fraudulent purposes. Fraudsters always look for new ways to invade our privacy and personal financial information and one of the uprising scams is called Caller ID Spoofing.

MCMC is seriously concerned on reports that Caller ID information is being manipulated for fraudulent or deceptive purposes and the impact of those practices on public trust and confidence in the telecommunications industry. It is also alarming on how this practice may affect consumers as well as public safety and law enforcement communities.

Since 2017, MCMC has been working together with service providers and Commercial Crime Investigation Department (CCID) of PDRM to take action in addressing scam call issues. An Industry Reference (IR) was developed and issued in 2018

to manage and mitigate these issues. The IR on Call Spoofing contains best practices and technical guidelines for respective service providers to undertake preventive and precautionary measures to mitigate scam call issues. In combating fraud via telecommunications channel, a virtual taskforce comprising of MCMC, service providers and CCID was formed to monitor and response immediately within 24 hours.

Based on numerous discussions during the taskforce meetings, it was reported that there is an increase in the number of complaints on this issue and the finding from the investigation shows that the offenders/ fraudsters have changed their modus operandi (MO) using others channels in the network. MCMC together with the service providers have initiated to review the current IR towards mitigating these issues.

## SCAM AWARENESS CAMPAIGN

Apart from monitoring on scam/spoof call issues, there are several initiatives in educating and providing awareness to the public about MO of scammers. KKMM has initiated a working group for *Kempen Kesedaran Jenayah Siber*. The working group consists of MCMC, PDRM, Bank Negara Malaysia and all agencies under KKMM (Bernama, RTM, Jabatan Penerangan Malaysia (JaPen), FINAS). The ongoing campaigns are as below:

SCAM AWARENESS CAMPAIGN 2019		
Promotion	Details	Duration
TV Crawlers	8 scripts - English and BM All TV stations	1 October - 31 December 2019
Radio Public Service Announcements	8 scripts - English and BM All radio stations	
TV and radio interviews	Interviews with RTM Negeri nationwide by Regional Office Heads	October 2018 - December 2019
<i>Klik Dengan Bijak</i> information videos	Video on financial scam - from MCMC, Finas and JaPen	October 2018 - December 2019
<i>Klik Dengan Bijak</i> infographic social media postings	Infographics from KKMM/JaPen	October 2018 - December 2019
<i>Klik Dengan Bijak</i> Educational Module	Used in Internet safety programmes and talks nationwide	October 2018 - December 2019

Source: MCMC

Figure 6.12 Scam Awareness Campaign 2019

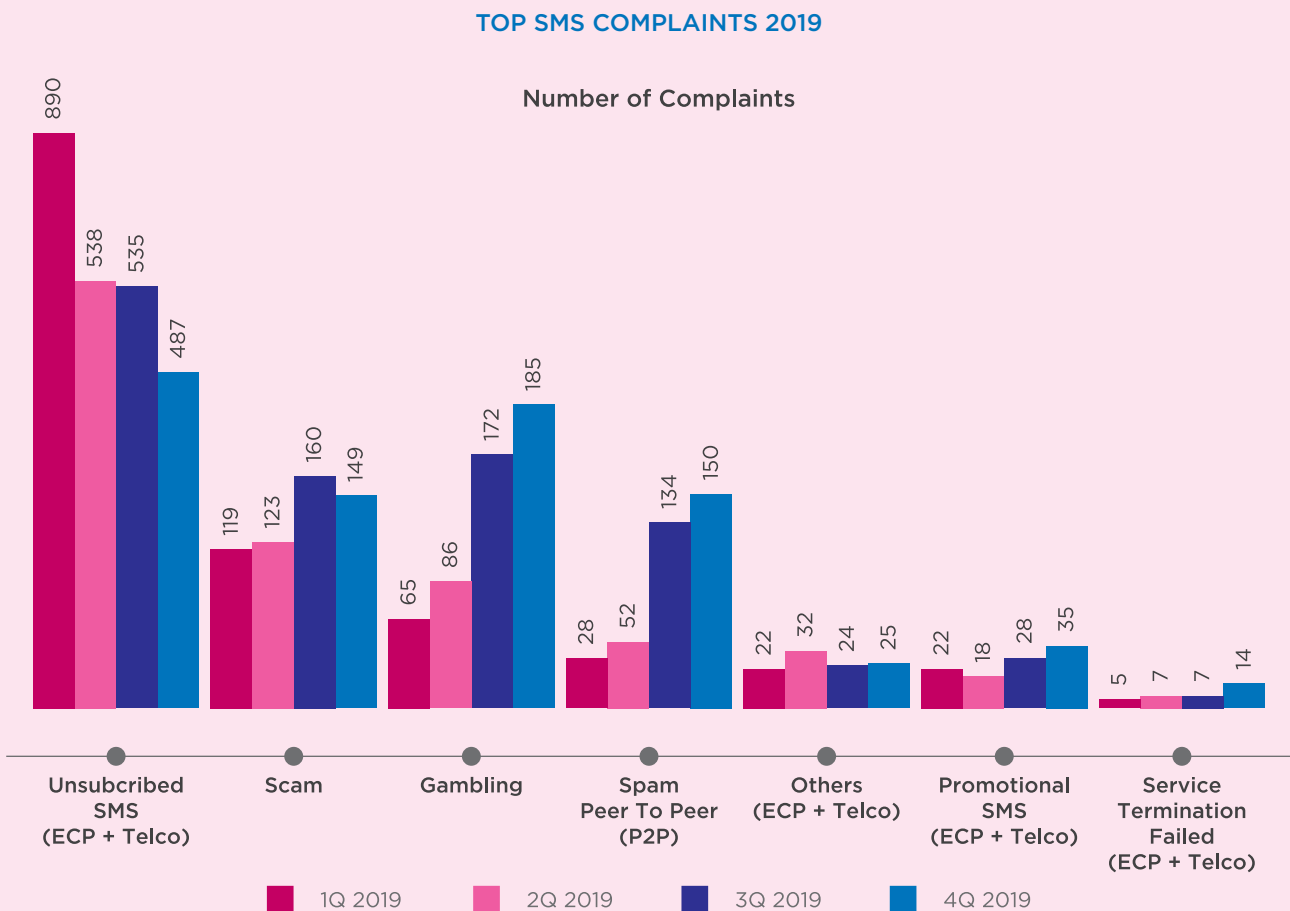


## MOBILE CONTENT SERVICES (MCS)

The Mandatory Standards for the Provision of MCS, Determination No. 4 of 2009 (MSMCS) is used to provide adequate consumer safeguard and guidelines for the mobile content industry.

In recent years, the evolution of mobile communication technology and Internet protocol (IP) based services has allowed mobile contents to be available on any mobile and fixed devices that supports IP-based content platforms.

The convergence of MCS with IP-based content services has created a gap in the regulatory framework of MSMCS. The fluidity of the mobile content industry has also caused MCS to be one of the top SMS related complaints that MCMC receives on a monthly basis, represented by “Unsubscribed External Content Provider (ECP) + Telcos” category illustrated in figure below:



Source: MCMC

Figure 6.13 Top SMS Complaints 2019

Through consistent administrative actions i.e. warning letters, penalties and suspension of MCS short codes and keywords, MCMC has managed to reduce the overall MCS quarterly complaints. MCMC is continuously working together with the mobile content industry players and aggregators in addressing MCS issues faced by the mass subscribers.

MCMC has consulted and engaged with various stakeholders since 2015 with the aim to review the MSMCS that is targeted for completion by 2020. The review is expected to provide an update to the MSMCS and the necessary tools to ensure continued safeguard of consumers.

## TERMINATION OF MOBILE NUMBER DUE TO ILLEGAL ADVERTISEMENT

The issue of illegal advertisement has raised alarming concern for the local authorities in Malaysia. The issue is seen increasingly active whereby the illegal ads were posted everywhere particularly at public places. Such activities are affecting the image of the cities in Malaysia particularly the city of Kuala Lumpur.

The local authorities in Malaysia intensified its monitoring and enforcement activities to curb the issues efficiently and ensure due punishment under the relevant regulations. Apart from that, the local authorities have also initiated a collaboration with MCMC to terminate all numbers displayed or posted in the illegal advertisement.

The initiative which started since the year 2012, requires an official application from the local authorities to MCMC to enable the termination process of the affected mobile numbers. A working group was established consisting Ministry of Urban Wellbeing, Housing and Local Government (KPKT) and MCMC to develop a standard operating procedures to coordinate and standardise affected mobile number termination process.

The table below indicates a total number of mobile numbers terminated for 2019.

NUMBER OF MOBILE NUMBER TERMINATED 2019				
Local Authority	Total Submission	Termination	Incomplete Submission or Application	Inactive
Dewan Bandaraya Kuala Lumpur	811	575		236
Majlis Perbandaran Klang	142	142		
Majlis Perbandaran Kubang Pasu	62	60	2	
Majlis Perbandaran Sungai Petani	50	50		
Bahagian Siasatan Jenayah Komersial (IPD Johor Bahru Selatan)	36	0	36	
Majlis Perbandaran Muar	18	7	11	
Majlis Perbandaran Subang Jaya	6	6		
Majlis Perbandaran Seberang Perai	3	3		
Majlis Daerah Sarikei	2	0	2	
Bahagian Siasatan Jenayah Komersial (IPD Pontian)	2	0	2	
Ibu Pejabat Polis Daerah Ipoh	1	1		
Majlis Perbandaran Kluang	1	1		
<b>TOTAL</b>	<b>1,134</b>	<b>845</b>	<b>53</b>	<b>236</b>

Source: MCMC

Figure 6.14 Number of Mobile Number Terminated 2019

## INDUSTRY SELF-REGULATING FORUMS

Protecting the interest of consumers of C&M services is a primary task of MCMC. Therefore, it is important that consumers, consumer associations and other interest groups are made aware of the regulatory measures that effectively safeguard consumer rights and privileges.

### COMMUNICATIONS AND MULTIMEDIA CONSUMER FORUM OF MALAYSIA

The year 2019 was an important year for Communications and Multimedia Consumer Forum of Malaysia (CFM) as the General Consumer Code of Practice (GCC), which was first registered in 2003, was reviewed and approved by MCMC for Public Consultation. It is expected that the revised Code will be registered by 2Q 2020.

CFM started to manage GCC-related complaints from end to end since March 2019 for all service providers except for TM, Maxis, Digi and Celcom, which falls under the purview of MCMC. As at end 2019, a total of 1,240 complaints was handled by CFM.

CFM also contributed towards industry development by organising a briefing for its Demand Side and Associate Members on the Public Inquiry Paper for Mandatory Standard Quality of Services - Customer Service.

In addition, CFM also organised awareness programmes through different approaches throughout the year such as CFM Animatch, CFM

Explorace with Pahang FM and TripleM Explorace in collaboration with MTSFB and CFM Demand Side Member and Multimedia University.

CFM conducted Dialogues Forums with members of the public on topics such as The Changing Landscape of Broadband; Consumer Protection in the Spam, Scam and Fraud with CFM Demand Members and Universiti Kebangsaan Malaysia. In December 2019, CFM organised a Masterclass “Communications and Multimedia Advertising Guidelines: Are we doing it right?”, covering topics on promoting self-regulation and awareness on advertisement guidelines aligned with consumer protection requirements.

Year 2019 also saw the introduction of eight new members to CFM from both the supply and demand sides. CFM also gained 460 media coverage throughout the year and conducted 14 pocket talks to help increase public awareness on their rights.

### COMMUNICATIONS AND MULTIMEDIA CONTENT FORUM OF MALAYSIA

In accordance to CMA, Communications and Multimedia Content Forum of Malaysia (CMCF) is a designated industry body to facilitate and enhance industry self-regulation pursuant to the Malaysian Communications and Multimedia Content Code (Content Code). As an independent body, CMCF represents all relevant parties to govern content and address issues pertaining to content which are disseminated by way of the electronic networked medium.

CMCF strives to create a balance in the monitoring and regulation of the C&M industry framework in Malaysia based on the concept of self-regulation.

As at end 2019, CMCF has a membership of 46 organisations which consists of 42 Ordinary Members from various categories:-

- Advertisers
- Broadcasters
- Audiotext Service Providers
- Content Creators/Distributors
- Civic Groups
- Internet Access Service Providers

The membership also includes four Associate Members. The members have contributed their time and expertise in their respective fields, which led to the increase of CMCF capabilities in addressing any arising issues as well as to develop new policies for the development of electronic media content industry in Malaysia.

## BREAKDOWN OF COMPLAINTS BY CATEGORY 2019

Category	Number of Complaints
Internet Content	188
Mobile Content / Service	138
Broadcasting Content	6
Advertising Content	2
Others	6
<b>TOTAL</b>	<b>340</b>

Source: CMCF

Figure 6.15 Breakdown of Complaints by Category 2019

As at end 2019, CMCF received a total of 340 complaints via CMCF complaints portal, e-mails or letters from complainants in regards to various content issues. This shows a decline of 20% compared with 427 complaints received in 2018. The significant drop can be attributed to the activities carried out by the CMCF in effectively engaging with the public and it shows that they are more aware about the importance of self-regulation in practice.

By category, complaints on Internet Content was the highest with 188 cases, constituting 55.3% of total complaints received (Figure 6.15).

In 2019, CMCF has successfully reviewed the Content Code and submitted it to MCMC for approval. Registration of the second edition on Content Code is targeted to be completed by 2020.

CMCF published its bulletin entitled "Reaching Out", which can be downloaded from [www.stickswithyou.com](http://www.stickswithyou.com). This is an in-house

periodical produced in digital format for easy downloading and reading through digital devices. The bulletin covers current issues on electronic networked medium. A total of three bulletins were produced in March, July and December 2019.

CMCF organised number of workshops relating to self-regulation to the public, industry and government agencies in various states in Malaysia throughout 2019. The main purpose of these workshops was to promote the concept of self-regulation, whilst providing information and awareness to the participants of the workshops. In addition, CMCF also organised "Tea Talk" dialogue sessions that enabled two-way communications between the participants and CMCF. Industry players were invited to discuss any content related matters and challenges they face in creating and disseminating content, not necessarily related to compliance of the Content Code. As at end 2019, a total of 11 workshops and "Tea Talk" sessions were held.



## MALAYSIAN TECHNICAL STANDARDS FORUM BHD

The Malaysian Technical Standards Forum Bhd (MTSFB) was incorporated on 8 June 2004 and subsequently designated and registered by MCMC as the Technical Standards Forum pursuant to sections 94 and 184 of the CMA on 27 November 2004.

The primary role of MTSFB is to develop technical codes for the adoption by the C&M industry. In line with the CMA, MTSFB is tasked to develop technical codes which shall include, but is not limited to, the

requirements for network interoperability and the promotion of safety of network facilities.

To date, MTSFB has developed 45 technical codes in total which have been registered by MCMC. Out of which 22 technical codes developed for the purpose of certifying communications equipment under the Communications and Multimedia (Technical Standards) Regulations 2000. For 2019, seven technical codes have been registered as listed in Table below.

### LIST OF TECHNICAL CODES REGISTERED IN 2019

No.	Technical Codes
1	MCMC MTSFB TC T003:2019 - Private Automatic Branch Exchange (PABX) System for Connection to Public Switched Telephone Network (PSTN) and Internet Protocol (IP) Network (Second Revision)
2	MCMC MTSFB TC T011:2019 - Digital Terrestrial Television (DTT) Broadcast Service Receiver - Common Test Suite (First Revision)
3	MCMC MTSFB TC G019:2019 - Scheduled Waste Management for Base Station (Inclusive of E-waste)
4	MCMC MTSFB TC T013:2019 - Internet Protocol Version 6 (IPv6) - Equipment Compliance (First Revision)
5	MCMC MTSFB TC G009:2019 - Information and Network Security - Requirements (First revision)
6	MCMC MTSFB TC G020:2019 - Information and Network Security - Cyber Insurance Acquisition
7	MCMC MTSFB TC G021:2019 - Information and Network Security - Monitoring and Measurement of Security Control Objectives

Source: MTSFB

Figure 6.16 List of Technical Codes Registered in 2019

In light of the new initiatives of 5G implementation to support the future needs of Malaysia's Digital Economy, Industrial Revolution 4.0 (IR 4.0) and IoT, MTSFB has also been actively participating in the National 5G Task Force. As for the recently launched National Fiberisation and Connectivity Plan (NFCCP), MTSFB is also tasked to assess on the needs of reviewing the current related documents or developing new technical codes to support the initiatives.

## MCMC MONITORING ACTIVITIES

### PREPAID AUDIT ACTIVITY

MCMC has conducted a ground survey exercise in 2018 to assess the readiness of Optical Character Reader (OCR) implementation by service providers. In 2019, MCMC conducted prepaid audit activity to audit the compliance level of prepaid registration procedures by service providers and

its representatives (dealers) to the Guidelines on Registration of End-Users of Prepaid Public Cellular Services (Prepaid Guidelines). Any violation of the Prepaid Guidelines is an offence under the service provider's Licence Condition and an enforcement action can be taken under Section 242 of the CMA.

### MCMC INTERNAL AUDIT - MYSTERY SHOPPER

MCMC monitors the prepaid registration process by conducting regular dealer audit and surprise checks (mystery shopper). From 26 June 2019 until 3 October 2019, MCMC conducted Prepaid Registration Audit Exercise in Central Region-Klang Valley areas and Eastern Region-Kelantan, Terengganu and Pahang areas.

A total of 573 registered dealers were randomly selected and audited. Out of 573 dealers, 101 dealers

were found to be in breach of the Guidelines. Some of the dealers allowed registration using photocopy or pictures of identification documents and also sell pre-activated SIM cards. Further enforcement actions have been taken against the relevant service providers.

Table below is the summary for the Prepaid Audit in Central and Eastern regions.

#### SUMMARY OF PREPAID AUDIT IN CENTRAL AND EASTERN REGIONS

	Number of Dealers Audited	Compliance	Non-Compliance
Central Region	55	48	7
Eastern Region	518	424	94
<b>TOTAL</b>	<b>573</b>	<b>472</b>	<b>101</b>

Source: MCMC

Figure 6.17 Summary of Prepaid Audit in Central and Eastern Regions

## AUDIT EXERCISE WITH INDUSTRY

A special taskforce was formed by MCMC and telecommunications service providers to monitor the prepaid registration activities and improvise the existing prepaid registration process. As per the Prepaid Guidelines, service providers are also directed to perform audit for its dealers, prepaid service end-users system and any other related system and records or database that are relevant. This is to ensure that the information recorded during the prepaid registration process are accurate.

From 4 to 8 November 2019, MCMC together with service providers conducted a Mass Prepaid Registration Audit Exercise at Sabah Region to assess:

The compliance level of prepaid registration procedures based on the new Prepaid Guidelines, especially on the implementation of OCR

To identify gaps and improvement plans for Prepaid Guidelines in mitigating fraud and false registration by dealers and agents

The audit was conducted using two methods:

Fact finding based on the subscriber's database for prepaid services verified with National Registry Department (NRD)

Dealer/agents audit

This audit serves as a platform for MCMC and service providers to strengthen cooperation, information sharing and discussion on prepaid registration with particular focus on improving the current registration of prepaid SIM card processes, development approaches, good policy practices as well addressing the challenges and opportunities.

Figure 6.18 is the summary for the Prepaid Audit in Sabah region.

SUMMARY OF PREPAID AUDIT IN SABAH REGION	
	Number of Dealers Audited
Kota Kinabalu	18
Sandakan	7
Tawau and Semporna	5
<b>TOTAL</b>	<b>30</b>

Source: MCMC

Figure 6.18 Summary of Prepaid Audit in Sabah Region

Amongst the findings based on the audit performed:

- Manual Registration is still allowed by some service providers.
- Dealers are not allowed to access the subscriber's information after the registration of SIM Card has been performed.
- Dealers are only able to view information on the status of registration; name; mobile number and registration date for limited numbers and can only be viewed by the devices that performed the registration only.
- Dealers did not frequently change their login id and password for the application provided by the service providers for registration.
- Capturing of information using Card Reader is more accurate compared to OCR.

The findings are shared with the service providers for their further improvement action.



**RM2.7 million**  
Compound issued  
for not complying  
with the Prepaid  
Guidelines

MCMC continuously undertake monitoring and enforcement activities to ensure service providers' and their representatives comply with the Prepaid Guidelines. Apart from the audit conducted to check on the prepaid registration process, MCMC also performed the data verification exercise with NRD to verify the integrity of prepaid subscriber's database and to rectify unmatched data from service providers' database.

Total compound issued to service providers in 2019 for not complying with the Prepaid Guidelines were RM2.7 million.

## MONITORING OF CASP (I) LICENSEES FOR CONTENT COMPLIANCE

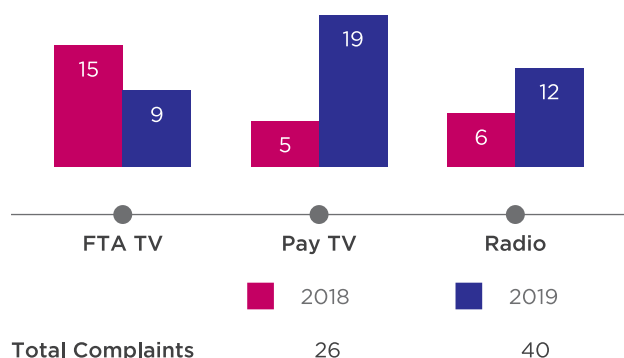
In accordance with the CMA, CASP (I) licensee is required to comply with the licence conditions, Content Code and CMA.

MCMC continues to focus on social regulation by strengthening the monitoring of private radio and TV broadcasting content to ensure the development of content that reflects culture, identity and norms of society.

In 2019, a total of 40 complaints which were related to radio and TV broadcast content were received and investigated by MCMC. As shown in the Figure 6.19, there were 19 complaints on Pay TV, 12 complaints on radio followed by nine complaints on Terrestrial Free to Air (FTA) TV.

Overall, there is an increase of 54% in complaints received on broadcast content; 40 complaints in 2019 compared to 26 complaints in 2018.

### COMPLAINTS ON BROADCAST CONTENT BY PLATFORM



Note: Subscription TV – ASTRO, unifi TV; Terrestrial FTA TV – TV3, TV9, ntv7, 8TV and TV AlHijrah

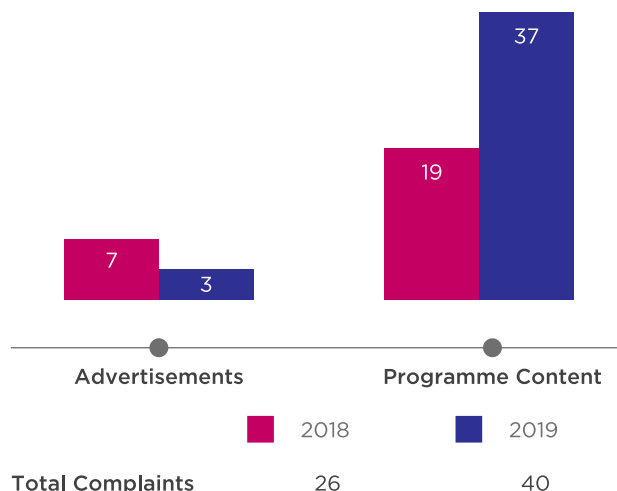
Source: MCMC

Figure 6.19 Complaints on Broadcast Content by Platform

Out of 40 complaints received in 2019, 92.5% were on programme content such as news, movie, drama and song lyrics in which the content were found to be offensive, false, menacing, indecent and obscene. Most of the content were related to sensitive content, inappropriate visual/scene and bad language. The remaining 7.5% were complaints on advertisements.

The co-regulation efforts between MCMC and Ministry of Health (MOH) have shown an improvement of compliance by the CASP (I) licensees relating to commercial advertisements/ promotion on health, food and cosmetics products. This has resulted in significant reduction of complaints from seven complaints in 2018 to only three complaints in 2019.

### COMPLAINTS ON BROADCAST CONTENT BY CATEGORY



Note: Subscription TV – ASTRO, unifi TV; Terrestrial FTA TV – TV3, TV9, ntv7, 8TV and TV AlHijrah

Source: MCMC

Figure 6.20 Complaints on Broadcast Content by Category

In this regard, MCMC has taken proactive action to monitor the live programmes such as compliance briefing to the broadcasters prior to the live programmes schedule as well as attend both rehearsal and live events to ensure the TV station’s compliance with the Content Code, CMA and other relevant regulations.

### LIVE/REHEARSAL PROGRAMMES ATTENDED

No.	Programme	Station
1	Anugerah Juara Lagu 33	TV3
2	Anugerah Bintang Popular Berita Harian 2019 ke-32	TV3
3	Anugerah Skrin 2019	TV3
4	Karpet Merah Anugerah Skrin 2019	TV3

Source: MCMC

Figure 6.21 Live/Rehearsal Programmes Attended



## SPECTRUM MONITORING

Spectrum monitoring for both terrestrial and satellite in 410-430MHz band and C-band respectively were executed based on Spectrum Monitoring Plan 2019. 17 frequencies were identified operating without Apparatus Assignment (AA) and 15 of them were used by Mal-Tel Communication Sdn Bhd as shown in table below:

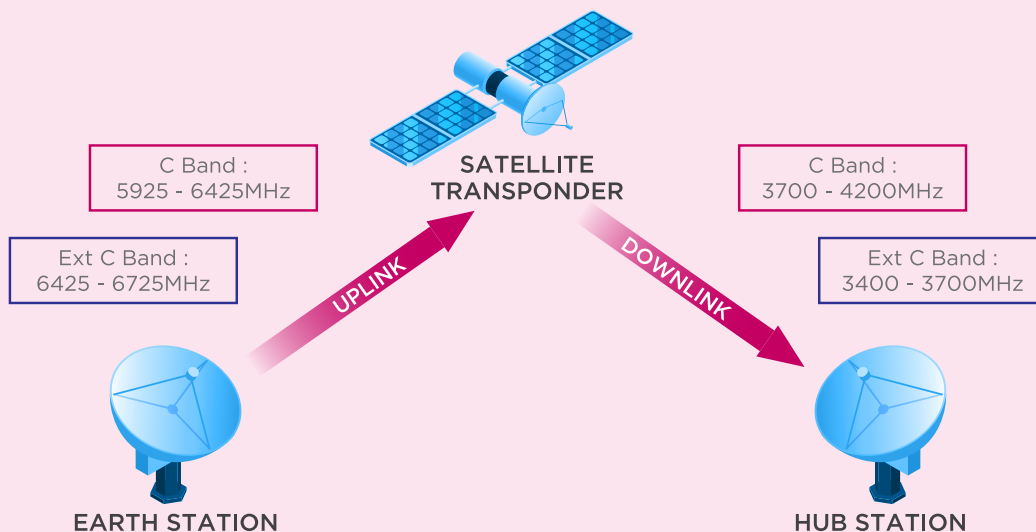
FREQUENCIES OPERATING WITHOUT AA IN 2019				
No.	Frequency (MHz)	Bandwidth (kHz)	Location	Station Owner
1	422.65	12.5	Apartment Ria	Mal-Tel
2	422.6875	12.5	Apartment Ria	Mal-Tel
3	422.9	12.5	Apartment Ria	Mal-Tel
4	422.9375	12.5	Apartment Ria	Mal-Tel
5	423.4375	12.5	Apartment Ria	Mal-Tel
6	423.4625	12.5	Celcom Jenderam	Mal-Tel
7	423.7	12.5	TM Bukit Lanjan	Unknown
8	423.725	12.5	Apartment Ria	Mal-Tel
9	423.8625	12.5	Apartment Ria	Mal-Tel
10	423.95	12.5	TM Bukit Lanjan	Unknown
11	424.1375	12.5	Apartment Ria	Mal-Tel
12	424.1625	12.5	Apartment Ria	Mal-Tel
13	424.3875	12.5	Apartment Ria	Mal-Tel
14	424.425	12.5	Apartment Ria	Mal-Tel
15	424.4375	12.5	Apartment Ria	Mal-Tel
16	424.6875	12.5	Apartment Ria	Mal-Tel
17	424.9375	12.5	Apartment Ria	Mal-Tel

Source: MCMC

Figure 6.22 Frequencies Operating without AA in 2019

MCMC started spectrum monitoring on satellite band in 2019 using a new satellite monitoring system which comes with eight metres parabolic dish installed at MCMC Former Headquarters. Monitoring is focused on C-band uplink transmissions via orbital slot 91.5°E under MEASAT satellites. The utilisation of frequency and bandwidth by ground station operators were audited based on its AA. C-band ground stations use frequency range from 3400 to 4200MHz for downlink and 5925 to 6725MHz for uplink transmission as shown in figure below.

### OVERVIEW OF TYPICAL C-BAND SATELLITE COMMUNICATION ARCHITECTURE



Source: MCMC

Figure 6.23 Overview of Typical C-Band Satellite Communication Architecture

Table below shows total of 78 non-compliance earth stations due to transmission without AA, operating at different frequency or bigger bandwidth based on service providers' AA. All non-compliance cases were issued with Administrative Notice, whilst two FIR were issued for non-compliance cases in Pahang.

### NUMBER OF NON-COMPLIANCE C-BAND EARTH STATIONS COMMUNICATING WITH MEASAT SATELLITES 2019

No.	Licensee	AA Records*	Non-compliance	Reason for Non-Compliance
1	Celcom Axiata Bhd	67	65	Transmission of frequencies without AA
2	Maxis Broadband Sdn Bhd	201	4	Different frequency and bigger bandwidth
3	Measat Broadcast Network Systems Sdn Bhd	14	2	Different frequency
4	Measat Satellite Systems Sdn Bhd	62	0	-
5	Rignet Sdn Bhd	4	1	Bigger bandwidth
6	Satellite Noc Sdn Bhd	1	0	-
7	Scopetel Sdn Bhd	2	2	Bigger bandwidth
8	Sistem Televisyen Malaysia Bhd	2	0	-
9	Telekom Malaysia Bhd	14	1	Bigger bandwidth
10	Tenaga Nasional Bhd	1	1	Different frequency

\*Note: Number of frequencies that were not renewed in 2019 and being monitored for any non-compliances

Source: MCMC

Figure 6.24 Number of Non-Compliance C-Band Earth Stations Communicating with MEASAT Satellites 2019

## COMPLIANCE AND MONITORING OF ACCESS INSTRUMENTS

In 2019, MCMC was involved in the implementation, compliance and monitoring of the following access instruments:

Commission Determination on Access List, Determination No. 2 of 2015 (Access List)

Commission Determination on the Mandatory Standard on Access, Determination No. 3 of 2016 (MSA)

Commission Determination on the Mandatory Standard on Access Pricing, Determination No. 1 of 2017 (MSAP)

A key activity that was conducted as part of implementation was to educate the industry on the access framework and the roles and responsibilities of licensees. Hence, in 2019, MCMC conducted eight awareness sessions for 43 new Individual licensees.

In 2019, MCMC assessed more than 51 Access Agreements for registration pursuant to Section 150 of the CMA. In addition, MCMC assessed more than 21 Reference Access Offers (RAO) that were published by Access Providers on their websites. MCMC reviewed and assessed both the Access Agreements and the RAOs to ensure that they comply with the CMA and access instruments aforementioned.

Furthermore, MCMC also engaged with a total of 19 licensees on the submission of Reporting Obligations in April and October 2019 for the Transmission Service, Network Co-location Service, Duct and Manhole Access, HSB Network Services,

Mobile Virtual Network Operator Access and Digital Terrestrial Broadcasting Multiplexing Services. MCMC received and assessed more than 76 reports to ensure the Access Providers' compliance to the access instruments.

Another important role of the MCMC in 2019 is the resolution of complaints and disputes between licensees related to access. Eight complaints were received on the supply of facilities and services in the Access List and/or pertaining to compliance with the MSA and MSAP, of which, six of eight complaints have been resolved.

MCMC has facilitated the negotiations between the parties to ensure effective competition and for the long-term interests of the industry and consumers.





# QUALITY OF SERVICE

## MANDATORY STANDARDS ON QUALITY OF SERVICE

Mandatory Standards for Quality of Service (MSQoS) have been established to protect consumers in Malaysia in terms of quality of service and enforced to all relevant service providers.

MSQoS under the CMA is to monitor and regulate the performance of services offered to consumers. The purpose of the MSQoS is to:

- Enhance and protect user rights;
- Provide users with clear and specific criteria to measure the quality of services accepted or adopted; and
- Enhance international competitiveness by strengthening the local industry.

A total of eight Commission Determinations on the MSQoS were registered between 2002 and 2016;

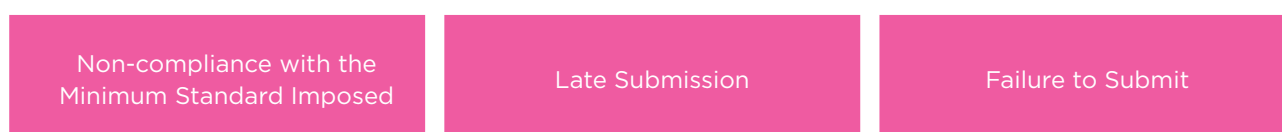
REGISTERED DETERMINATIONS ON MSQOS	
No.	Mandatory Standard
1	Public Switched Telephone Network Service (PSTN) Determination 1 of 2002
2	Dial Up Internet Access Service (DIAS) Determination 3 of 2002
3	Content Applications Services (CAS) Determination 4 of 2002
4	Public Payphone Service (PPS) Determination 3 of 2003
5	Digital Leased Line Service (DLL) Determination 4 of 2003
6	Public Cellular Service (PCS) Determination 1 of 2015
7	Wireless Broadband Access Service (WBAS) Determination 1 of 2016
8	Wired Broadband Access Service (BAS) Determination 2 of 2016

Source: MCMC

Figure 6.25 Registered Determinations on MSQoS

Each licensee is obliged to submit reports to MCMC no later than 30 days from the end of every quarterly reporting period or 6 weeks from end of June or December if the reporting is on half yearly basis.

The non-compliance with the MSQoS is categorised into three categories:



Any breaches to the MSQoS shall be liable to a fine not exceeding RM200,000 under section 109 of CMA or RM100,000 or imprisonment for a term not exceeding two years or both under Section 242 of CMA.

## COMPLIANCE ON CUSTOMER SERVICE QUALITY OF SERVICE

Based on the reporting and analysis, the common denominator for the non-compliances are the following standards which affects most of the major service providers:

MAJOR NON-COMPLIANCES	
No.	QoS Indicator/Standard
1	Promptness in Resolving Customer Complaints
2	Non-billing Related Complaints Per 1,000 Customers
3	Promptness in Answering Calls to Customer Hotline <ul style="list-style-type: none"> <li>• 80% in 20 seconds</li> <li>• 90% in 40 seconds</li> </ul>

Source: MCMC

Figure 6.26 Major Non-Compliances

As at end 2019, total of 22 licensees were issued with Notice on Non-Compliances for breach on minimum standard and late submission. Below are the list of standards that the licensees failed to comply, which led to the issuance of the notices.

LIST OF STANDARDS		Number of Non-Compliance			
No.	Standard	Quarter 1	Quarter 2	Quarter 3	Quarter 4
1	Late Submission	-	1	1	1
2	Promptness in Resolving Customer Complaints (Non-Billing Related Complaints)	2	2	-	1
3	Promptness in Resolving Customer Complaints (Billing Related Complaints)	-	2	-	1
4	Promptness in Answering Calls to Customer Hotline	3	3	3	4
5	Non-Billing Related Complaints per 1000 Customers	1	3	-	2
6	Service Restoration Fulfillment	1	1	1	1
7	Service Disruption	1	1	1	-
<b>TOTAL</b>		<b>8</b>	<b>13</b>	<b>6</b>	<b>10</b>

Source: MCMC

Figure 6.27 List of Standards

## NETWORK PERFORMANCE ASSESSMENT

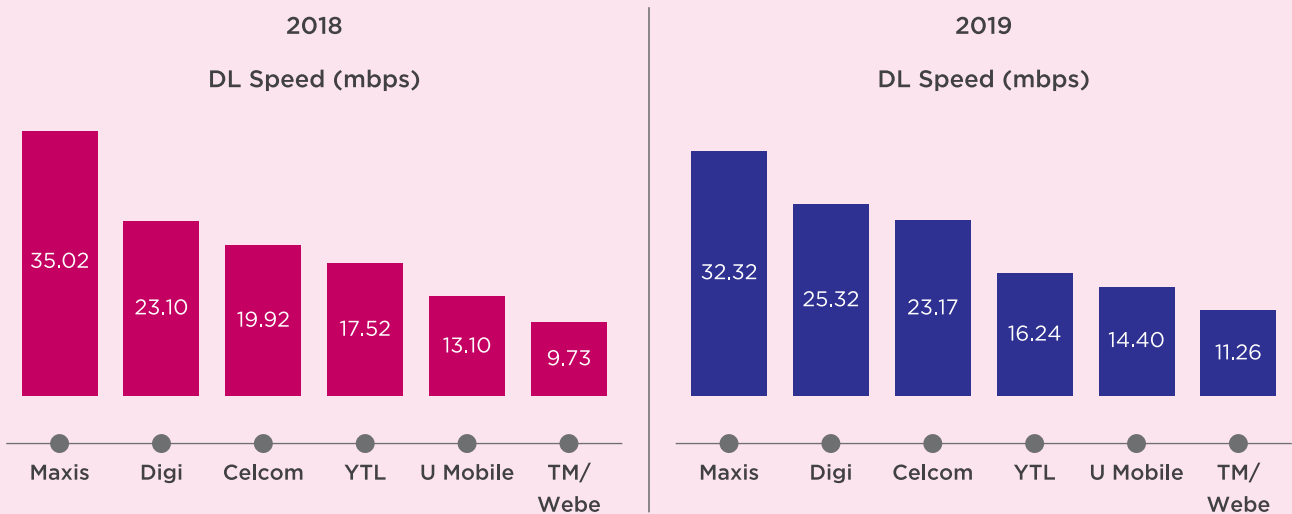
MCMC conducts yearly network performance assessment on public cellular voice, mobile broadband and fixed broadband services. Service providers' performance are measured nationwide based on standards specified in the MSQoS that encompasses Public Cellular Service, Wireless Broadband Access Service and Wired Broadband Access Service. In 2019, measurements were carried out from January to December 2019 and the full network performance report will be published in early 2020.

Service providers' performance in terms of network QoS is a determining factor of the quality that the customers will experience. The International Telecommunication Union for Standardization (ITU-T) viewpoints of QoS defines that QoS offered and delivered by service providers will relate to the QoS perceived and required by the customers. The MSQoS is in place to ensure the minimum QoS requirements are met by the service providers to satisfy the demands of the customers.

### WIRELESS BROADBAND ACCESS SERVICE PERFORMANCE

Monitoring the network performance for consumer experience of using mobile data is essential in today's digital environment of data hungry consumers. Figure 6.28 and Figure 6.29 below describe average download throughput (Mbps) and average network latency (ms) respectively, for each mobile service provider in Malaysia for 2019, in comparison to 2018.

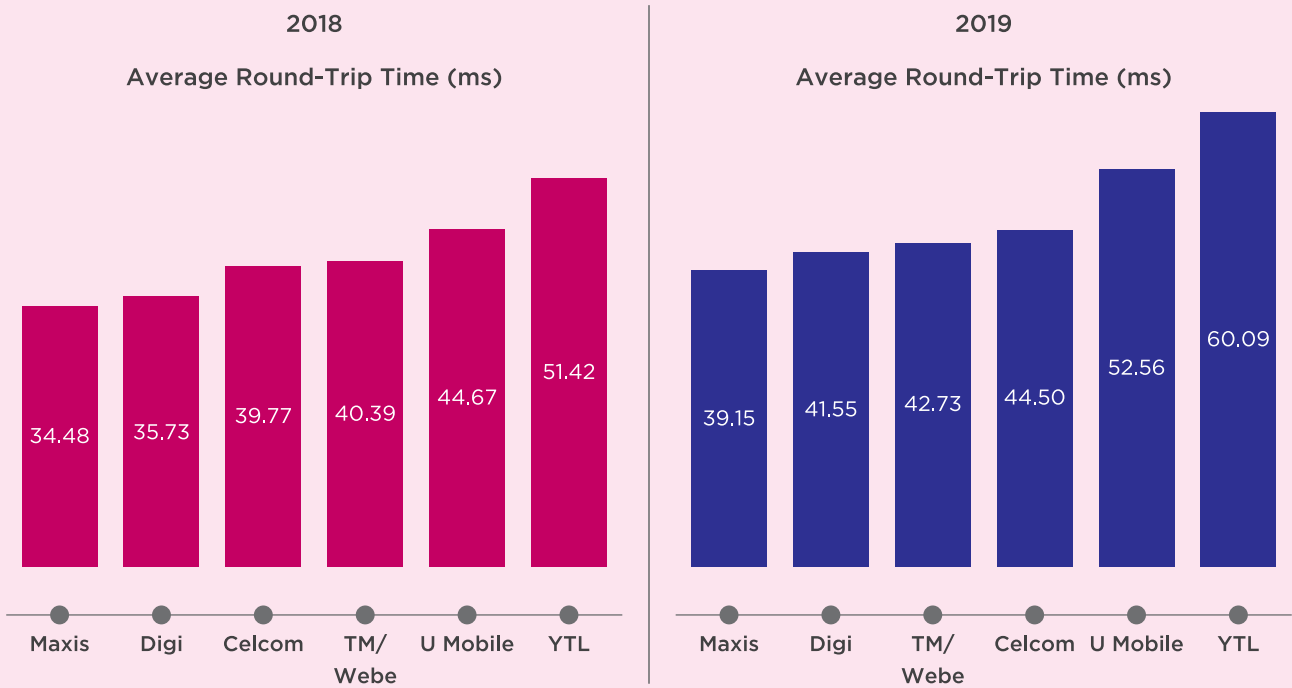
#### NETWORK PERFORMANCE FOR WIRELESS BROADBAND - AVERAGE DOWNLOAD (DL) THROUGHPUT



Source: MCMC

Figure 6.28 Network Performance for Wireless Broadband - Average Download (DL) Throughput

**NETWORK PERFORMANCE FOR WIRELESS BROADBAND - NETWORK LATENCY**



Source: MCMC

Figure 6.29 Network Performance for Wireless Broadband - Network Latency

In 2019, the test locations for wireless broadband assessment comprises more on residential and industrial areas while maintaining samples for business and urban areas.

**WIRELESS BROADBAND PERFORMANCE TEST RESULT 2019**

Service Provider	% of Time		Packet Loss (%) (≤ 3%)
	Speed ≥ 1 Mbps (≥ 80%)	Latency ≤ 250ms (≥ 70%)	
Celcom	98.10%	99.77%	0.12
Digi	97.97%	99.07%	0.02
Maxis	98.76%	99.78%	0.00
U Mobile	91.67%	99.26%	0.00
TM/Webe	89.29%	99.47%	0.03
YES (LTE)	98.16%	98.42%	0.00

Source: MCMC

Figure 6.30 Wireless Broadband Performance Test Result 2019

## WIRED BROADBAND ACCESS SERVICE PERFORMANCE

As for wired broadband network performance, MCMC measures the QoS of individual home Internet. Measurements were performed on premise to gauge the actual service received vis-à-vis customer's subscription package.

Network performance parameters for both digital subscriber line (DSL) and fibre connections in the MSQoS shall be complied by the fixed service providers to safeguard the interest of the paying customers. Figure 6.31 below shows the network performance of wired broadband services for fixed broadband service providers in Malaysia for 2019.

WIRED BROADBAND PERFORMANCE TEST RESULT 2019								
Service Provider	Digital Subscriber Line Technology (%)				Fibre Technology (%)			
	Upload Speed	Download Speed	Round Trip Time	Packet Loss	Upload Speed	Download Speed	Round Trip Time	Packet Loss
	≥ 70% subscribed speed for ≥ 90% of the time		≥ 95% of the time	≤ 1.0%	≥ 90% of subscribed speed for ≥ 90% of the time		≥ 95% of the time	≤ 1.0%
TM	100.0	99.9	96.2	1.0	98.8	92.2	98.9	0.2
Maxis	39.5	96.6	96.6	0.2	93.7	93.7	95.4	0.5
TIME	N/A				95.1	95.7	100.0	0.0

Source: MCMC

Figure 6.31 Wired Broadband Performance Test Result 2019

In terms of speed and latency, fibre connection as the last mile is expected to perform better than DSL. As fibre technology could reach higher Gigabit speed, service providers are gradually moving towards replacing the DSL technology to fibre for better performance.

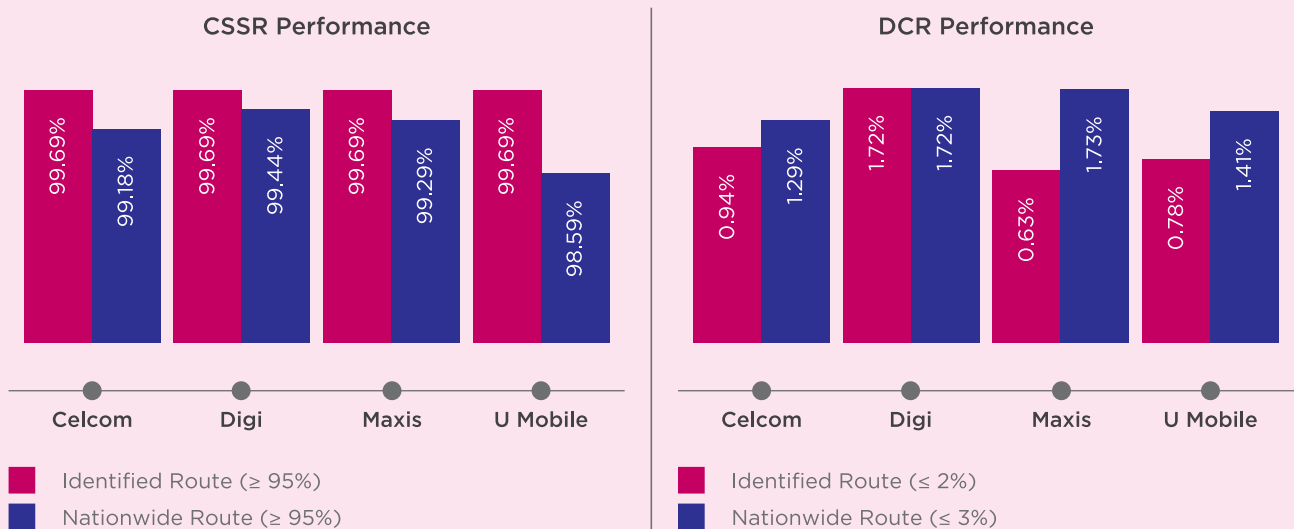




### PUBLIC CELLULAR SERVICE PERFORMANCE

Public cellular service (PCS) or voice call service is essential even in today’s trend of growing demand for data. Voice calls made on traditional circuit switch utilising 3G and 2G networks are still prevalent for communications. Hence, network performance on voice accessibility and retainability are measured nationwide by MCMC to ascertain service providers’ network capability to meet the minimum requirement for call setup success rate (CSSR) and dropped call rate (DCR) as stated in the MSQoS. Figure 6.32 shows the CSSR and DCR performance on nationwide and identified routes for 2019.

#### PCS PERFORMANCE RESULT 2019

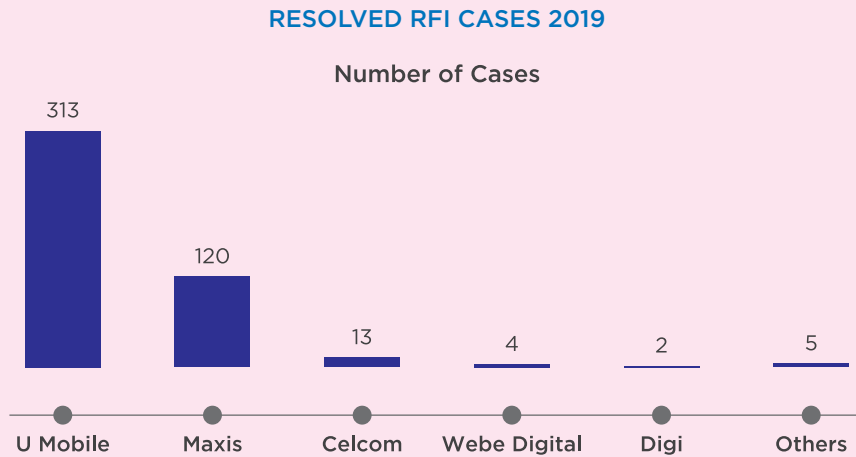


Source: MCMC

Figure 6.32 PCS Performance Result 2019

## RADIO FREQUENCY INTERFERENCE

In 2019, a total of 467 Radio Frequency Interference (RFI) cases were resolved. By service category, resolved RFI cases under Mobile Service remain the highest with 457 cases in total. 97.8% of these cases are under Mobile Service as shown in Figure 6.33.

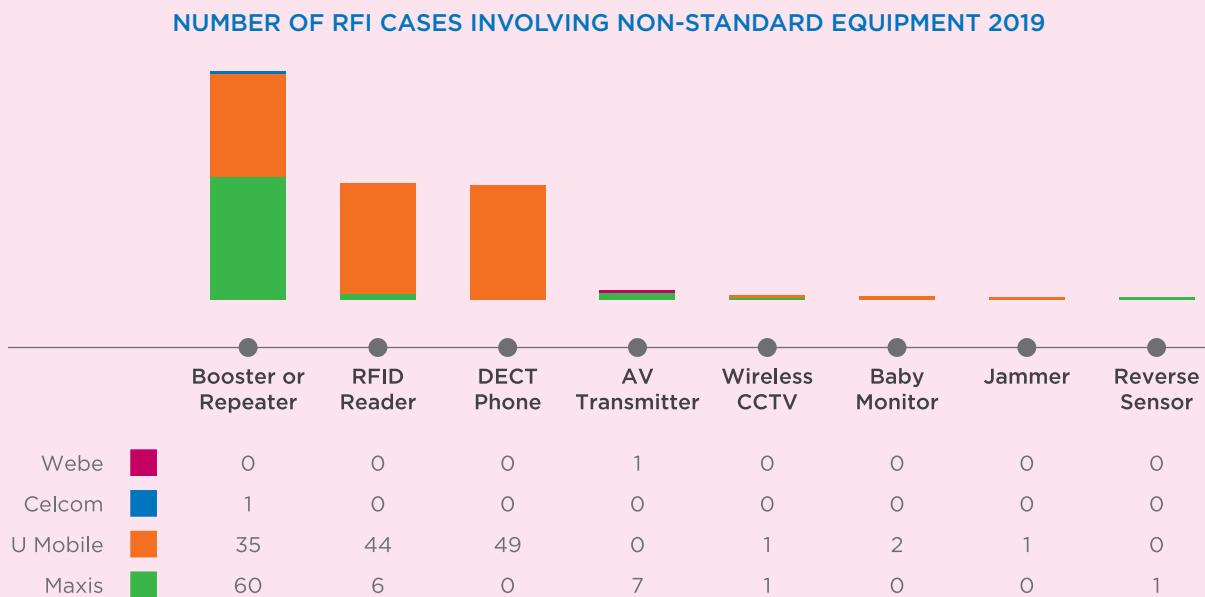


Source: MCMC

Figure 6.33 Resolved RFI Cases 2019

U Mobile Sdn Bhd cases significantly increased to 313 cases in 2019 from 113 cases in 2018. This is mainly due to aggressive site roll out in new 900MHz band across Malaysia as well as continuous public usage of non-standard equipment.

Figure 6.34 below summarised the number of RFI cases involving non-standard equipment such as cellular boosters or repeaters, RFID readers and Digital Enhanced Cordless Technology (DECT) phones.

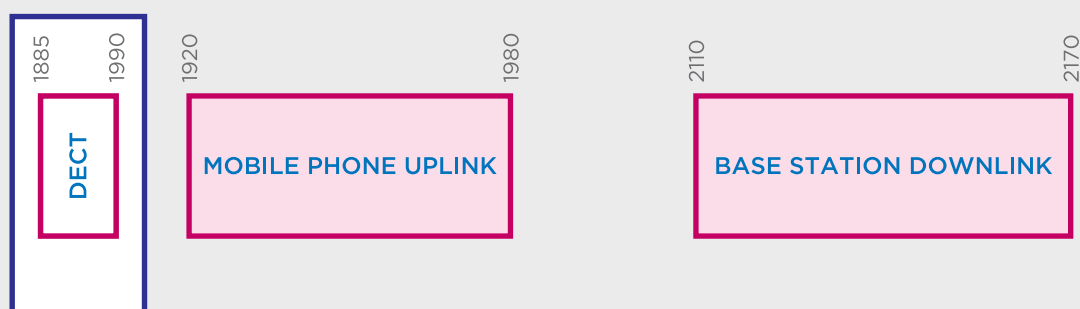


Source: MCMC

Figure 6.34 Number of RFI Cases Involving Non-Standard Equipment 2019

DECT phone is a cordless phone that connects to a landline telephone system. It consists of a phone base and one or two headsets that communicates wirelessly via radio spectrum. MCMC allocates radio spectrum between 1885MHz and 1990MHz for DECT as shown below.

### SPECTRUM ALLOCATION FOR DECT IN MALAYSIA



Source: MCMC

Figure 6.35 Spectrum Allocation for DECT in Malaysia

However, the number of non-standard DECT phones caused interference has increased by 33 sets compared to 2018, marking the highest increase in interference cases amongst other non-standard equipment. The non-standard DECT phone operates in same frequency range as mobile phone uplink whereby its operation will interfere with the nearest base station to receive mobile phone signals.

Unfortunately, non-standard DECT phones are widely sold on e-commerce platforms such as Lazada and Shopee. Apart from investigations conducted by MCMC, the public are advised to check for MCMC label prior to purchase any DECT phones. Table below shows models of non-standard DECT phones found during RFI investigation.

### NON-STANDARD DECT PHONE MODELS FOUND DURING RFI INVESTIGATION

Brand	Non-standard DECT Models
PANASONIC	KX-TG1031S, KX-TG4011, KX-TG4021, KX-TG4023, KX-TG4031, KX-TG4131, KX-TG4731, KX-TG6411ML, KX-TG6521, KX-TG6591, KX-TG7641, KX-TG7731, KX-TG7871, KX-TG9541, KX-TGA470, KX-TGD510 and KX-TGC350
VTECH	CS6929
MOTOROLA	L603M

Source: MCMC

Figure 6.36 Non-Standard DECT Phone Models Found During RFI Investigation



## DIGITAL TERRESTRIAL TELEVISION (DTT) SIGNAL MEASUREMENT - MYFREEVIEW

MCMC concluded the DTT measurement for all 44 DTT sites on 27 June 2019. A total of 14 DTT sites were measured in 2019, consists of five sites located in West Malaysia and nine sites in East Malaysia. DTT broadcasts its services through transmission towers and its coverage are influenced by the location of the transmitter antenna. A total of 46 from 504 test points failed to decode mostly due to blind spot. Direct-to-Home (DTH) satellite service is made available at these 46 locations to achieve 100% population coverage for myFreeview.

Transition from analogue TV to digital myFreeview was completed on 31 October 2019. Public are advised to check the coverage in their area with MYTV Broadcasting Sdn Bhd before deciding to purchase a DTT or DTH set-top-box. This is due to DTT and DTH set-top-box has different set up, whereby DTT set-top-box receives digital TV channels from an Ultra High Frequency (UHF) Yagi antenna, whereas DTH set-top-box receives channels from a satellite dish.

Figure 6.37 shows a recent DTT measurement at Pekan Rabu, Langkawi.

### DTT MEASUREMENT FOR GUNUNG RAYA SITE AT PEKAN RABU, LANGKAWI



Source: MCMC

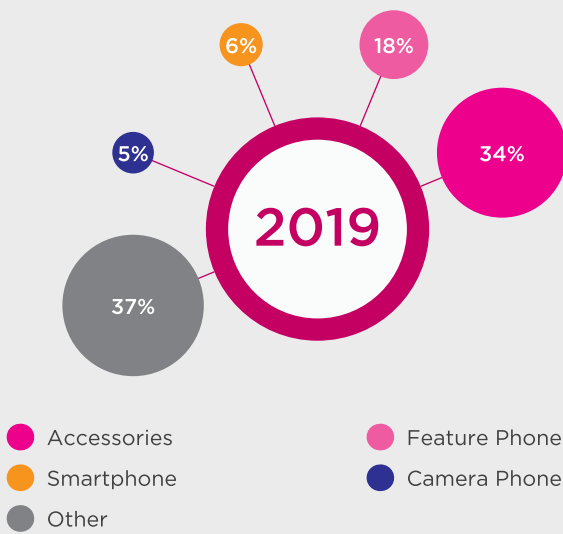
Figure 6.37 DTT Measurement for Gunung Raya site at Pekan Rabu, Langkawi

## MOBILE E-WASTE PROGRAMME

The Mobile e-Waste programme is an initiative of MCMC with strategic partners to spread awareness for responsible disposal of electronic waste. The programme has received encouraging traction in 2019 with additional new members and implementation of several advocacy activities.

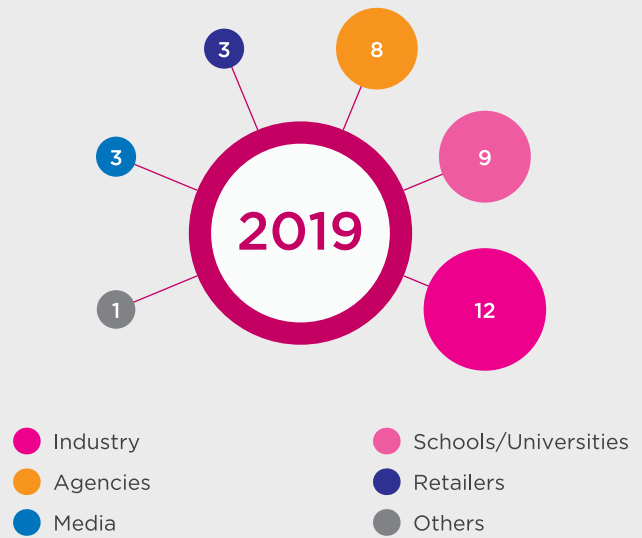
Mobile e-Waste collection trend shows an encouraging rate of growth since 2015. Total collection increased by over 49% (1,530.99kg) to 4,638kg from 3,107.01kg in 2018. In total, over 7,000 units of old and faulty mobile phones were collected, thus far.

**MOBILE PHONES AND ACCESSORIES COLLECTION 2019**



Source: MCMC  
Figure 6.38 Mobile Phones and Accessories Collection 2019

**MOBILE E-WASTE PARTNERS BY CATEGORIES 2019**



Source: MCMC  
Figure 6.39 Mobile e-Waste Partners by Categories 2019

The Mobile e-Waste programme started in 2015 with a total of six partners from the C&M industry. Currently, the programme has more than 40 participating partners contributing to placement of more than 200 collection boxes throughout Peninsular Malaysia, Sabah and Sarawak. MCMC partners include companies from various industries, retail companies, media agencies, government agencies and NGOs, including schools and universities (Figure 6.39).

## STAR RATING AWARD

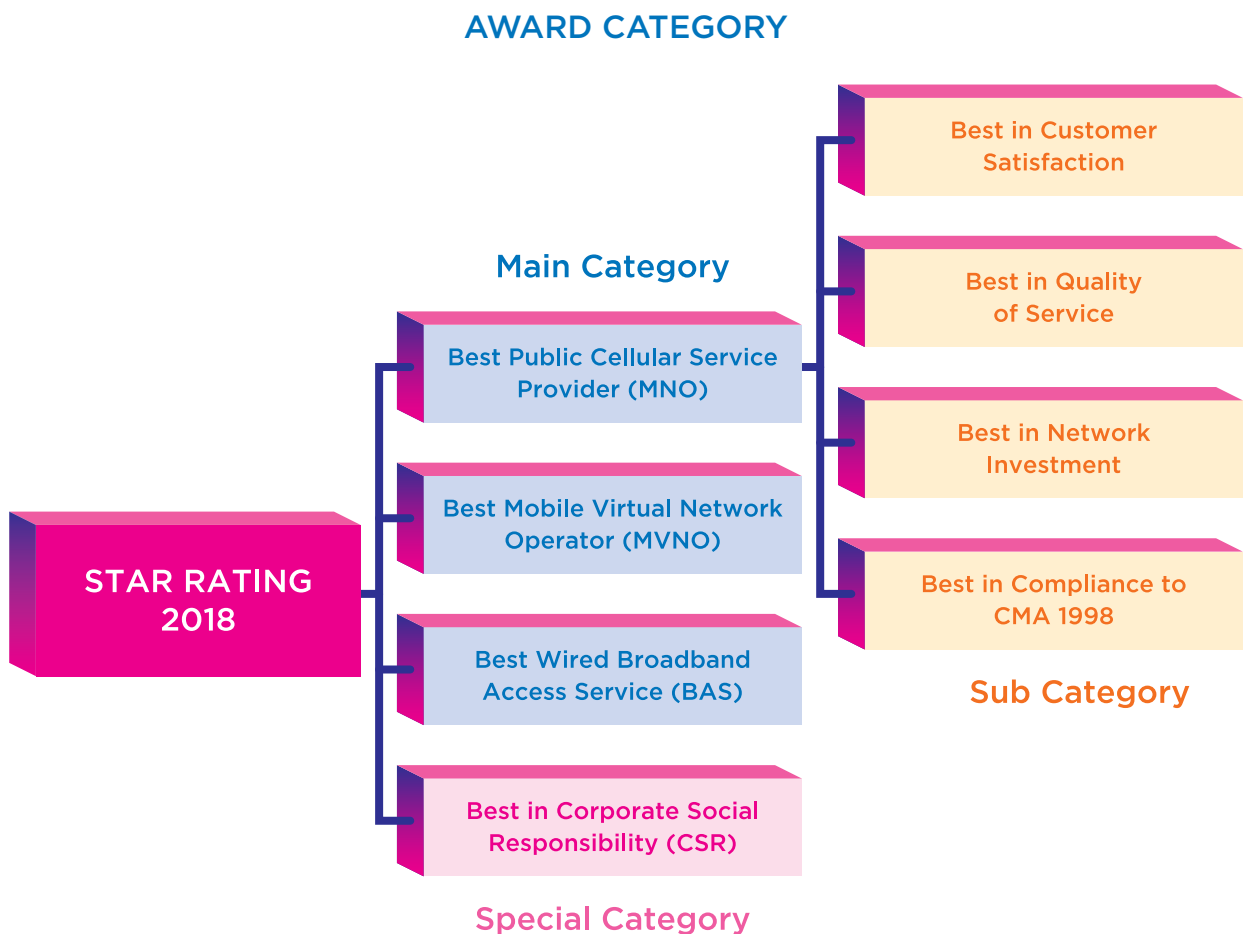
Star Rating Award is held once in every two years since 2014, aims at recognising the outstanding services provided by telecommunication companies to consumers as well as to instill a culture of quality excellence and create a healthy competitive environment amongst the service providers.

The Star Rating Award is based on the performance of service providers throughout the one year assessment period. The assessments made are based on strategic parameters set by MCMC and verified by the Evaluation Committee and independent Consultant.

## CATEGORY AND CRITERIA OF SELECTION

Star Rating 2018 is divided into two major telecommunications services, namely the Public Cellular Service (PCS) and Wired Broadband Access Service (BAS). BAS is a new category added in this Star Rating Award 2018.

The Award further categorised PCS into two groups which are Mobile Network Operator (MNO) and MVNO.



Source: MCMC

Figure 6.40 Award Category

The Award retained different sets of assessment parameter for both MNO and MVNO and also CAS to ensure each service provider is able to compete in level-playing field and stimulate a positive competitive environment. The key assessment parameters consist of:

Consumer Satisfaction

Quality of Service

Network Investment

Compliance to the CMA







Methodology used for the evaluation comprise Consumer Satisfaction Survey and Report Evaluation. The weightage of each assessment parameter was developed based on the importance of the parameter to consumers. In order to ensure that the Award is more consumer centric, the voice of consumers via “Consumer Satisfaction” parameter carries the highest weightage.

The PCS (MNO and MVNO) with more than 250,000 active subscribers and BAS with more than 50,000 active subscribers as at 31 December 2018 are eligible to compete for the Award.

## STAR RATING AWARD 2018

The Star Rating Award 2018 Ceremony was held on 3 December 2019, to recognise and honour the achievement of the winners of the Star Rating Award 2018.

Star Rating Award received overwhelming response from the telecommunications service providers as it encourages them to continuously strive in uplifting their performances in each parameter set by MCMC.

	Digi Telecommunications Sdn Bhd won 3 out of 8 award categories for the “Best MNO Provider”, “Best Consumer Satisfaction” and “Best Quality of Service” awards
	XOX Com Sdn Bhd won the “Best Mobile Virtual Network Operator” award
	Celcom Axiata Bhd won the “Best Corporate Social Responsibility” award for overall excellence in organising various impactful CSR programmes.
	U Mobile Sdn Bhd crowned with the “Best Quality of Service” award
	Maxis Broadband Sdn Bhd won the “Network Investment” award
	Webe Digital Sdn Bhd clinched the award for the “Best in Compliance to CMA”
	A new category, “Best Wired Broadband Access Service” was introduced at the Star Rating Award 2018 which was won by TT Dotcom Sdn Bhd