



國家通訊傳播委員會  
National Communications Commission



# 2021 Communications Market Report in Taiwan

Taiwan's Digital Economy in the Era of Convergence



## Preface

In a digital economy, determining how communications services are being used is not only vital to the operation and development of the communications industry, but is also a hugely significant factor influencing a wide range of other industries; consequently, it has become closely tied to the development of the national economy.

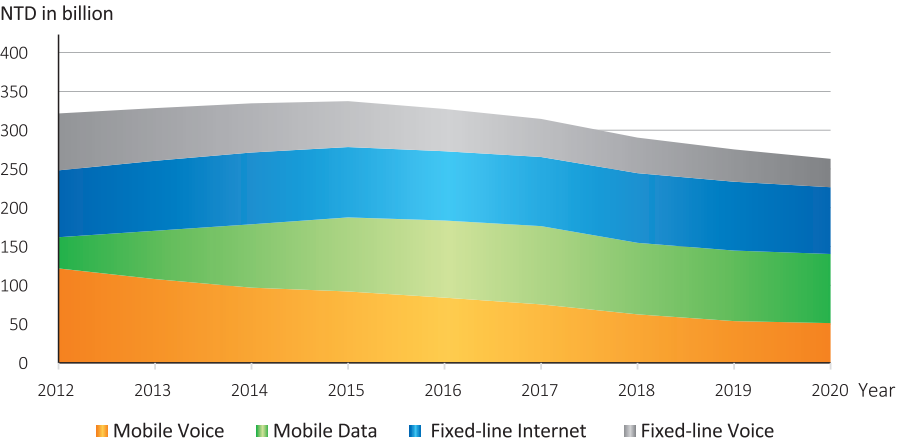
Due to the difficulty conducting a market survey during the COVID-19 pandemic, this year's communications market report does not contain the same level of market research as previous years. Instead, it highlights the supply aspects of the communications industry. Based on the market and industry data provided by regulators to NCC, as well as reports from international market research institutions, this report summarizes the latest developments in the communications industry in Taiwan and predicts future trends as a reference for future laws and policies.



## Popularity of Communication Applications Causing Decline in Revenue of Telecommunications Services

Due to the ubiquity of mobile broadband, people have generally become most used to accessing the internet with smartphones. The number of people doing so has grown rapidly, especially since the launch of 4G services in Taiwan in June 2014. Consequently, applications such as LINE, Facebook Messenger and WhatsApp, as well as a wide variety of others, have become the most convenient and reliable way to communicate for many. As a result, landlines, mobile communications and fixed broadband have all been used less frequently, meaning that the total revenue of telecommunications in Taiwan has decreased in recent years, with revenues from landline, mobile communications and fixed broadband shrinking significantly.

### Telecommunication Services Revenues



Source: NCC

Note: 4G services were added in 2014 and 5G services added in 2020. The data revenue does not include SMS revenue in accordance with the amended NCC definition.

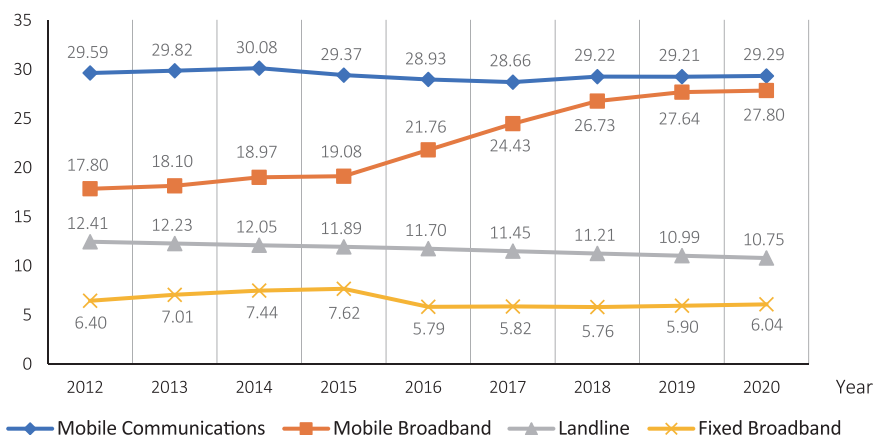


## 4G and 5G Services Drive Increase in Mobile Broadband Users

The number of mobile broadband accounts have surged over recent years, particularly in 2016 when a large number of people opted to change over to 4G services due to the increasing stability and convenience of 4G services, as well as the NCC subsidy program, which encouraged the upgrades from 2G with the support from telecom operators. Furthermore, the successive launch of 5G services since July 2020 have pushed the number of mobile broadband accounts up to 27.8 million, an increase of 10 million from 2012.

### Number of Telecom Users

Subscriptions  
in million



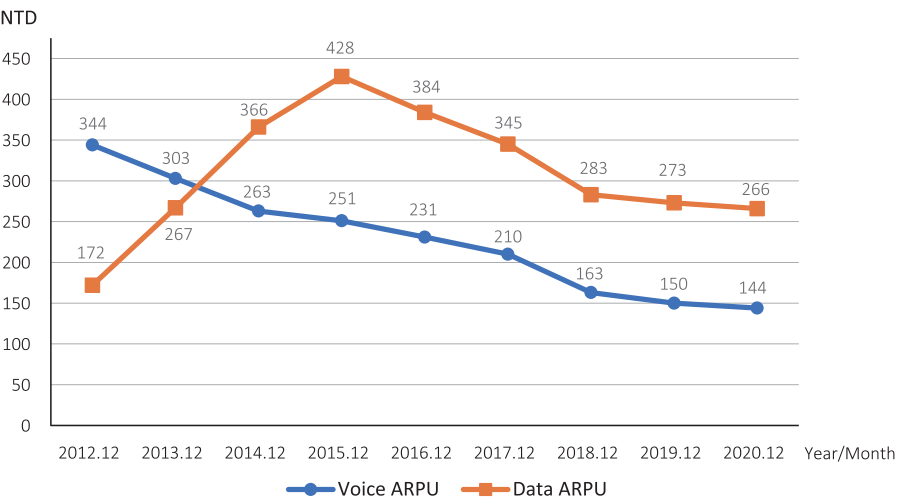
Source: NCC

Note: The number of mobile broadband accounts refers to the number of users who subscribe to data services.

## ARPU of Mobile Voice and Mobile Data Take Different Paths

Following the launch of 4G services in 2014, the ARPU (average revenue per user) of mobile communications (voice) and mobile data crossed. The ARPU of mobile data grew consistently, reaching a peak of NT\$428 in 2015, before declining year by year due to the maturity of technology and increased competition. In contrast, the ARPU of Mobile communications has continued to fall since 2012 from NT\$344 to NT\$144 in 2020.

ARPU of Mobile Voice and Mobile Data

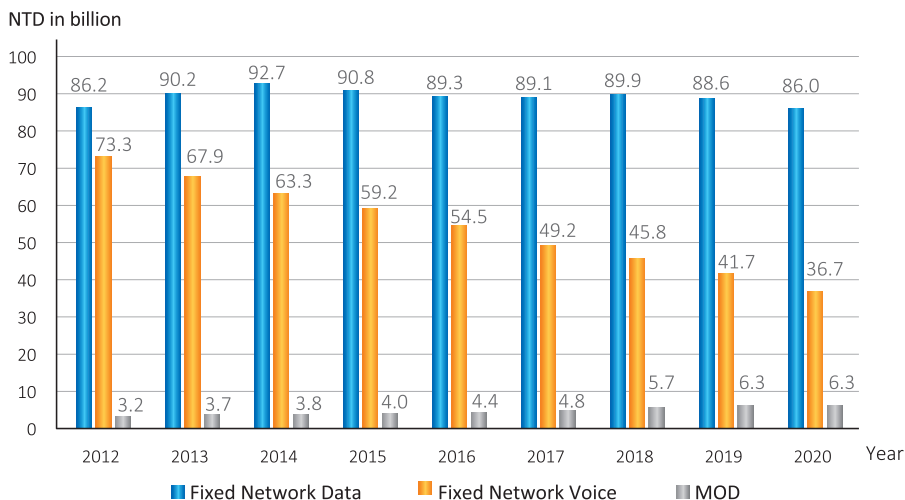


Source: NCC  
Note 1: 4G services were added in 2014.  
Note 2: 5G services were added in 2020.

## Revenue of Landline Communications Falling; Fixed Network Data Accounting for an Increased Share of Fixed Communications Revenue

As mobile communications became increasingly popular, revenue of landline communications dropped year-on-year. In 2020, total landline revenue fell to NT\$129 billion, a decrease of NT\$33.7 billion from 2012. Mobile communications have decreased the importance of landlines, and the internet has diminished landline communications revenue even more, which was only NT\$36.7 billion in 2020, a decrease of NT\$36.6 billion from 2012. Meanwhile, revenue of fixed network data that once reached NT\$92.7 billion in 2014, thanks to the development of optical fiber and cable broadband networks, fell to NT\$86 billion in 2020 following the launch of 4G and 5G services.

### Revenue of Fixed Line Communications



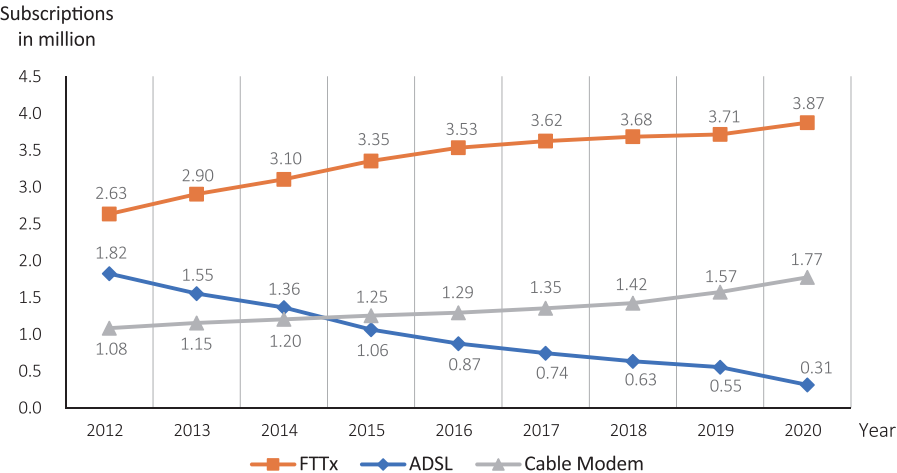
Source: NCC

Note: Fixed network data communications revenues include the internet, value-added service and circuit rental revenues. Due to rounding, the total value may not equal the sum of all.

## Number of ADSL Users Decreasing; Optical Fiber Users Growing Steadily

With the rapid development of high-speed network technologies, such as fiber optic and cable broadband, as well as the upgrade and promotional bundles offered by fixed network operators, the number of ADSL users in Taiwan has fallen significantly: from 1.82 million in 2012 to 310,000 in 2020. In contrast, the number of optical fiber users grew to a record high of 3.87 million in 2020, accounting for 69% of the total cable broadband users.

### Number of Cable Broadband Users



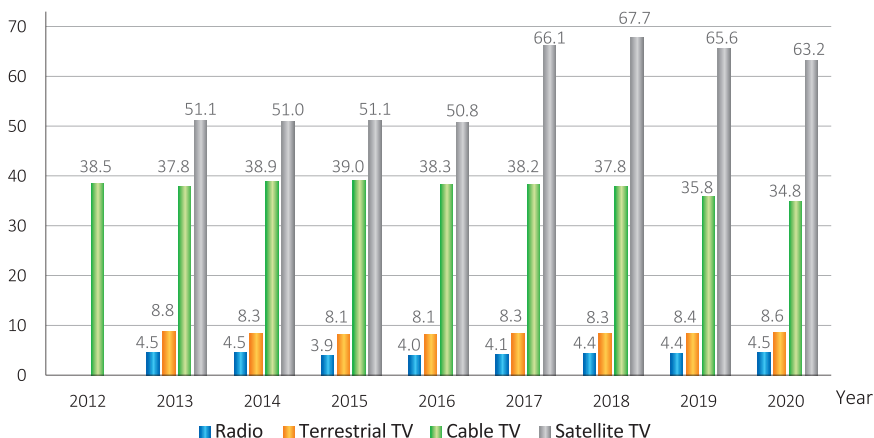
Source: NCC

## Broadcasting Revenue Declining; Cable TV Revenue Has Fallen to its Lowest Point in Recent Years

The overall revenue of broadcasting in Taiwan has been falling since 2018; satellite television is the main source of revenue, followed by cable television and then terrestrial television. Radio accounts for the smallest proportion. The revenue of satellite television has exceeded NT\$60 billion since 2017, peaking at NT\$67.7 billion; cable television revenue fell to NT\$34.8 billion in 2020. The revenues of terrestrial television and radio remained at an average of NT\$8.3 billion and NT\$4.2 billion respectively.

### Broadcasting Revenues

NTD in billion



Source: NCC

Note: The figure of overall cable TV industry revenue is the only data available for 2012.

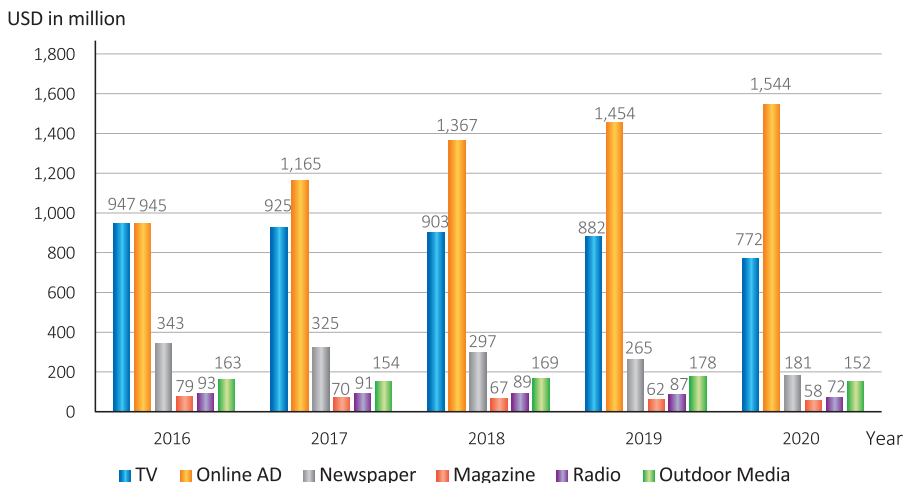
## Increase in Digital Advertising Causing Decline in Traditional Media Advertising

With the increased prevalence of mobile broadband and smartphones, the revenue of digital advertising in Taiwan has risen in recent years; subsequently, this has led to a decline in revenue of the five major traditional media – radio, television, newspapers, magazines and outdoor media. According to *Taiwan Entertainment & Media Outlook 2021-2025*<sup>1</sup> published by PricewaterhouseCoopers (PwC), online advertising reached US\$1,544 million (approximately NT\$45.668 billion<sup>2</sup>) in 2020, signifying that online media is certainly the trend in advertising in Taiwan.

<sup>1</sup>PwC. (2021). *Taiwan Entertainment & Media Outlook 2021-2025*. Obtained from <https://www.pwc.tw/zh/publications/topic-report/2021-taiwan-enm-outlook.html>

<sup>2</sup>The calculation is based on Central Bank's exchange rate in 2020 (NTD: USD = 29.578: 1)

### Media Advertising Output 2016-2020



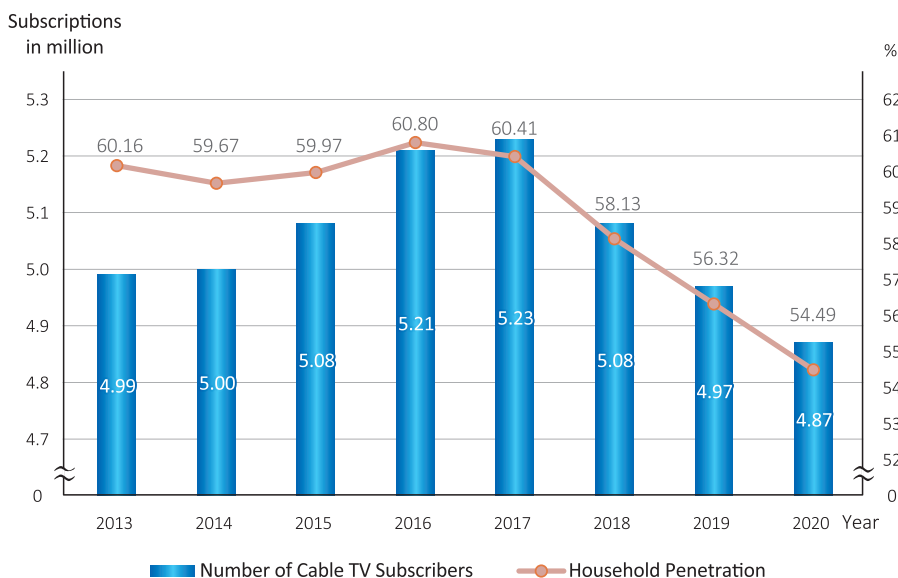
Source: PwC. (2021). *Taiwan Entertainment & Media Outlook 2021-2025*. Obtained from <https://www.pwc.tw/zh/publications/topic-report/2021-taiwan-enm-outlook.html>

Note: Broadcast advertising includes advertising on multi-channel television and broadcast television; out-of-home (OOH) advertising includes digital and practical OOH advertising; online advertising includes mobile internet advertising and cable internet advertising.

## Digital Cable TV Subscribers Falling

Since 2017, emerging video media like OTT TV and multimedia transmission platforms have diminished the number of cable TV subscribers in Taiwan to 4.87 million in 2020, the lowest in recent years.

### Cable TV Subscribers and Household Penetration



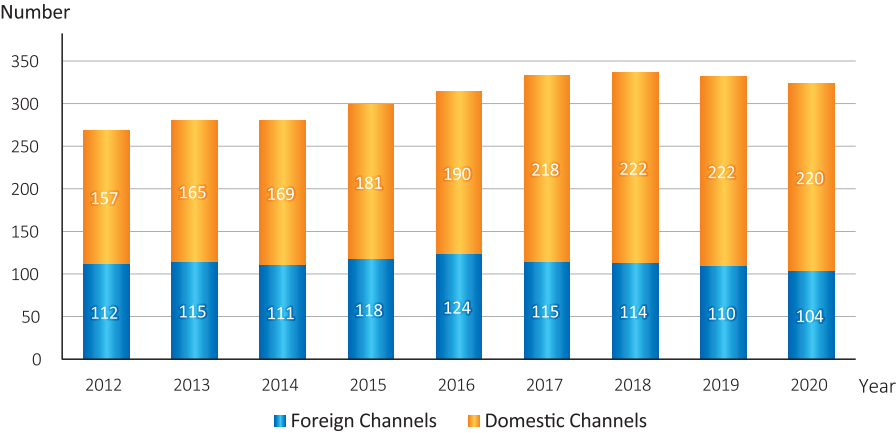
Source: NCC

Note: The number of cable TV subscribers in 2012 was not available.

Record High of 324 Satellite Broadcasting Channels,  
Domestic Channels Accounting for 67%

Following amendments to the Satellite Broadcasting Act, which was enacted on January 6, 2016, “other type” has been added as a kind of broadcaster. By the end of 2020, a total of 141 satellite (including other types) broadcasters were licensed to provide 324 channels. As of that time, 150 domestic satellite channels, 104 foreign satellite channels and 70 domestic “other type” channels were broadcasting in Taiwan.

Domestic and Foreign Channels



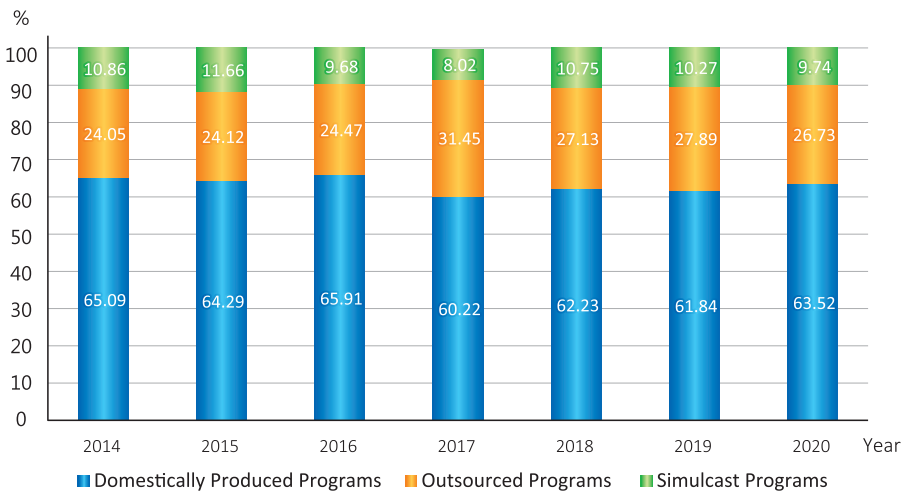
Source: NCC  
Note: Data of domestic channels includes “other” channels.



## Most Radio Broadcasting Programs Produced Domestically

When it comes to programs broadcast between 2014 and 2020, most were produced domestically, followed by those outsourced and simulcast. Overall, the proportion of domestically produced programs has risen in the last three years, while the proportion of simulcasts has fallen. In 2020, domestically produced, outsourced and simulcast programs reached 63.52%, 26.73% and 9.74% respectively.

### Domestically Produced, Outsourced and Simulcast Programs



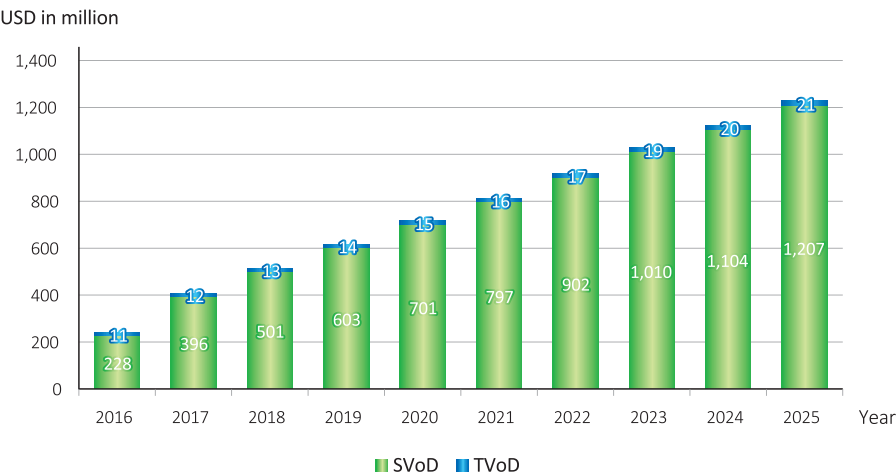
Source: NCC

Note: Due to rounding, the total value may not equal the sum of all values.

OTT Market Has Grown at a Compound Annual Rate of 31.6%

According to PwC’s Taiwan Entertainment & Media Outlook 2021-2025, video revenue in Taiwan grew year-on-year at a compound annual growth rate of 31.6% between 2016 and 2020. The total revenue in 2020 was US\$710 million (approximately NT\$21 billion ). The revenue from subscription video on demand (SVoD) accounted for more than 95%, while transactional video on demand (TVoD) represented less than 10%. PwC estimates that the total revenue will continue to grow at a compound annual growth rate of 11.4% from 2020 to 2025.

OTT Revenues in Taiwan



Source: PwC. (2021). Taiwan Entertainment & Media Outlook 2021–2025. Obtained from [www.pwc.tw/en/publications/assets/taiwan-entertainment-and-media-outlook-en.pdf](http://www.pwc.tw/en/publications/assets/taiwan-entertainment-and-media-outlook-en.pdf)  
Note: Due to rounding, the total value may not equal the sum of all.





[www.ncc.gov.tw](http://www.ncc.gov.tw)



國家通訊傳播委員會

National Communications Commission