

Appendix 1

REVISED CALCULATION STANDARDS TABLE OF FREQUENCY FOR MOBILE TELECOMMUNICATIONS

1. Payment of the frequency usage fee shall be made annually by the user of mobile communication frequency. (In New Taiwan Dollars through this Table)

= NT\$7,630,000 / MHz * assigned frequency bandwidth (including uplink and downlink bandwidth) * annual adjustment factor * coverage factor * frequency adjustment factor - discount fee for the participants of diverse digital application services - other discount fees

The relevant factor values are as follows:

(1) Annual Adjustment Factor:

- i. If the frequencies have been bid for in accordance with Regulations Governing Application and Assignment of Radio Frequency for Telecommunications Enterprises or Regulations for Administration of Mobile Broadband Businesses formulated in accordance with stipulations set forth under Paragraph 6 of Article 14 of the Telecommunications Act, the factor of the first year shall be applied from January 1 of the third year from the year when the competent authority announces the list of successful bidders.
- ii. The annual adjustment factor for each frequency band are as follows:
 - (i) 3500 MHz frequency band (3300 MHz to 3570 MHz) and 28000 MHz frequency band (27000 MHz to 29500 MHz): 0.1 in the first year, 0.1 in the second year, 0.5 in the third year, 0.7 in the fourth year, and shall return to 1 after five years.
 - (ii) Other frequency bands: 0.1 in the first year, 0.4 in the second year, 0.7 in the third year, and 1 in the fourth year.

(2) Coverage Factor:

4G Coverage in Designated Area 1 (L_{4G})	Population Coverage for Villages in Remote Areas with 4G Mobile Telecommunication Network (C_{4G})	Coverage Factor for Designated Area 1 (R_{4G})
$L_{4G} < 50\%$	$C_{4G} < 85\%$	0
	$85\% \leq C_{4G} < 90\%$	0
	$90\% \leq C_{4G} < 95\%$	0
	$95\% \leq C_{4G} < 99\%$	0
	$99\% \leq C_{4G}$	0
$50\% \leq L_{4G} < 90\%$	$C_{4G} < 85\%$	0.005
	$85\% \leq C_{4G} < 90\%$	0.025
	$90\% \leq C_{4G} < 95\%$	0.05
	$95\% \leq C_{4G} < 99\%$	0.075
	$99\% \leq C_{4G}$	0.0775
$90\% \leq L_{4G}$	$C_{4G} < 85\%$	0.01
	$85\% \leq C_{4G} < 90\%$	0.05
	$90\% \leq C_{4G} < 95\%$	0.1
	$95\% \leq C_{4G} < 99\%$	0.15
	$99\% \leq C_{4G}$	0.155

5G Coverage in Designated Area 1 (L_{5G})	Population Coverage for Villages in Remote Areas with 5G Mobile Telecommunication Network (C_{5G})	Coverage Factor for Designated Area 1 (R_{5G})
$L_{5G} < 50\%$	$80\% \leq C_{5G} < 85\%$	0
	$85\% \leq C_{5G} < 90\%$	0
	$90\% \leq C_{5G} < 95\%$	0

$50\% \leq L_{5G} < 90\%$	$95\% \leq C_{5G} < 99\%$	0
	$99\% \leq C_{5G}$	0
	$80\% \leq C_{5G} < 85\%$	0.015
	$85\% \leq C_{5G} < 90\%$	0.02
	$90\% \leq C_{5G} < 95\%$	0.0275
	$95\% \leq C_{5G} < 99\%$	0.035
$90\% \leq L_{5G}$	$99\% \leq C_{5G}$	0.04
	$80\% \leq C_{5G} < 85\%$	0.03
	$85\% \leq C_{5G} < 90\%$	0.04
	$90\% \leq C_{5G} < 95\%$	0.055
	$95\% \leq C_{5G} < 99\%$	0.07
	$99\% \leq C_{5G}$	0.08

Number of Points in Designated Area 2	Coverage in Designated Area 2 (M)	Coverage Factor for Designated Area 2
0	0	0
1-15	$M < 20\%$	0
	$20\% \leq M < 40\%$	0.01
	$40\% \leq M < 60\%$	0.02
	$60\% \leq M < 80\%$	0.03
	$80\% \leq M < 100\%$	0.04
	$M = 100\%$	0.05
16-30	$M < 20\%$	0
	$20\% \leq M < 40\%$	0.011
	$40\% \leq M < 60\%$	0.022
	$60\% \leq M < 80\%$	0.033
	$80\% \leq M < 100\%$	0.044
	$M = 100\%$	0.055
31-45	$M < 20\%$	0
	$20\% \leq M < 40\%$	0.012
	$40\% \leq M < 60\%$	0.024
	$60\% \leq M < 80\%$	0.036
	$80\% \leq M < 100\%$	0.048
	$M = 100\%$	0.06

- i. Coverage Factor = 1 - Coverage Factor for Designated Area 1 - Coverage Factor for Designated Area 2
 Coverage Factor for Designated Area 1 = Coverage Factor for Designated Area 1 (R_{4G}) + Coverage Factor for Designated Area 1 (R_{5G})
- ii. The identity of designated area 1 and designated area 2 coverage shall be announced by the competent authority before April 30 of previous charging year.
- iii. Frequency users shall submit a self-evaluation report for “4G Coverage in Designated Area 1”, “5G Coverage in Designated Area 1”, “Coverage in Designated Area 2” and “Population Coverage for Villages in Remote Areas with Mobile Telecommunication Network” before January 31 of each year. Upon verification by the competent authority, the “Coverage factor” shall be determined according to the aforesaid rate. If the self- evaluation report is not submitted within the time limit, the "Coverage factor" for the current year shall be 1.
- iv. Population under the electromagnetic wave coverage for Villages in Remote Areas: If the township meets one of the following conditions, it shall be calculated based on the total population of the village:
 - (i) The village in a remote area has more than one base station for mobile telecommunication network.
 - (ii) The coverage of mobile telecommunication network meets all the requirements after tests are conducted at three random places within the village.

- v. Population coverage of mobile telecommunication network for Villages in Remote Areas: population under the electromagnetic wave out of the total population of Villages in Remote Areas.
- vi. Remote Area is defined by Regulations Governing Universal Service of Telecommunications Enterprises; “4G” means the fourth generation of cellular wireless standards; “5G” means the fifth generation of cellular wireless standards.

(3) Frequency adjustment factor:

Range of used frequency (F)	Frequency adjustment factor
$F < 1\text{GHz}$	1
$1\text{GHz} \leq F < 3\text{GHz}$	0.75
$3\text{GHz} \leq F < 6\text{GHz}$	0.18
$6\text{GHz} \leq F$	0.004

2. Discounts for the participants of diverse digital application services:

- (1) The due date for the application and applicable standards: The users of mobile telecommunication frequency shall submit the application before January 31 every year, and the amount which is applicable to the discount will be determined after the application is examined and approved by the competent authority.
- (2) Categories of Application:
 - i. Vertical Application Service: Those who have cooperated with the demanders in specific fields and provided the main vertical application service in the field with the radio frequency obtained by auction are eligible to apply for the discount.

Vertical application service pattern: The fields with the vertical applications that meet the needs of specific industries by combining hardware with software or cloud services include, but are not limited to, smart factories, smart retail, smart healthcare, smart cities, smart transportation, smart entertainment, smart buildings, smart education, smart energy, and smart agriculture.
 - ii. Digital Trust Service: Those who develop systems or applications and other digital application services to establish a trustworthy telecommunication environment, serve the public interest, improve people's daily lives, or provide a better communication experience and have the certification of substantial benefits are eligible to apply for the discount.
 - iii. Data Innovation Service: Those who provide cross-domain analysis application services for government agencies and public utilities with telecommunication signaling statistics are eligible to apply for the discount. The aforementioned cross-domain analysis application services include, but are not limited to, the prediction of traffic flow and pedestrian flow.
 - iv. Promotion of Energy Conservation and Sustainability: Those who deploy highly efficient and energy-saving mobile communication network equipment to improve frequency utilization efficiency and energy conservation, enable the general public to enjoy the results of communication network construction and sustainable development and have the concrete proof of power saving performance are eligible to apply for the discount.
- (3) Calculation of discounts: The calculation is based on the amount of each application submitted by a mobile communication frequency user in the year prior to the billing year, multiplied by the discount rate approved by the competent authority.
- (4) Upper limit on discounts: For each application in a single category, if it is deemed to serve the public interest, the maximum discount rate is 50% of its amount; for those which are not of the aforementioned nature, the upper limit is 30%. The upper limit of discount for a single provider is 28 million New Taiwan Dollars, and the upper limit of discount for each

application category is 7 million New Taiwan Dollars; if the discount amount in each category reaches 3.5 million New Taiwan Dollars (inclusive) after review, it is not subject to the upper limit on the discount for respective category.

- (5) The aforementioned implementation period and discount rate will be reviewed annually by the competent authority based on the development of diverse digital applications, and the discounts will be abolished when the development of applications becomes mature and stable.

3. Other Discounts:

- (1) Discounts for promoting the harmonious use of radio frequencies for satellite fixed communications:

- i. Calculation method for the frequency usage fee of the 27900 MHz to 29500 MHz band (hereinafter referred to as the 28GHz band):

Mobile communication frequency user's usage fee for using the 28GHz band =
 $\text{NT\$7,630,000 /MHz} \times \text{allocated bandwidth in the 27900 MHz to 29500 MHz band} \times$
 $\text{annual adjustment factor} \times \text{coverage factor} \times \text{band adjustment factor}$

- ii. Application method: Users of the mobile communication frequency in the 28GHz band can choose either a per-case discount or a non-per-case discount plan to offset the frequency usage fee for the 28GHz band. Those who choose the per-case discount can reselect during the application in the following year; those who choose the non-per-case discount cannot change the discount plan once selected.

- iii. Conditions for the non-per-case discount application: Users of the mobile communication frequency in the 28GHz band must sign an agreement for the harmonious shared use of the 28GHz band with users of radio frequencies for satellite fixed communications, as stipulated by the competent authority (hereinafter referred to as the agreement), for their feeder link usage. Those who do not follow the agreement will not be eligible for this discount from that year onward.

- iv. Application Procedures and Calculation Methods for Applicable Plans:

- 1) Per-case discount: Mobile communication frequency users of the 28GHz band who reach an agreement with other telecommunications businesses, enabling them to obtain an approval letter or frequency usage certificate for satellite fixed communications (hereinafter referred to as the issued document), can apply before January 31 each year. The discounts are calculated as follows:
 - ① The base for the discount is 2% of the frequency usage fee of the mobile communication frequency users of the 28GHz band for that year.
 - ② If the frequency mentioned in the issued document obtained by the other telecommunication business overlaps with the frequency used by the mobile communication frequency users of the 28GHz band, the discount is calculated by multiplying the proportion of the previous year's validity period of that issued document by the base.
 - ③ If the issued document mentioned in ② is due for renewal, the entire validity period should be considered in the calculation.
 - ④ If the issued document obtained by the other telecommunication business mentions different applicants or satellite systems, the discount fees will be cumulatively calculated.
 - ⑤ The maximum discount is 20% of the frequency usage fee for the mobile communication frequency users of the 28GHz band for that year.
- 2) Non-per-case discount: Mobile communication frequency users of the 28GHz band can apply before April 30 each year. The discounts are calculated as follows:
 - ① The discount is 20% of the frequency usage fee of the mobile communication

frequency users of the 28GHz band for that year.

- ② If the users of the 28GHz band do not follow the agreement, the fee discount will not be granted; if the frequency usage fee paid in that year already includes the discounts, the competent authority will notify the mobile communication frequency users to make up the payment within a specified period.

(2) 5G User Proportion (P_{5G}) Discounts:

- i. Application deadline and criteria: Mobile communication frequency users can submit the 5G user proportion data for the previous month (i.e., May) by June 15 each year. After being reviewed by the competent authority, it is calculated as per the following table.
- ii. The formula for calculating the 5G User Proportion (P_{5G}) is as follows:
- $$5G \text{ User Proportion } (P_{5G}) = \text{Number of 5G users} / (\text{Number of 4G users} + \text{Number of 5G users})$$

5G User Proportion (P_{5G})	Discounts for Individual Mobile Communication Frequency Users
$30\% \leq P_{5G} < 40\%$	15,000,000 New Taiwan Dollars
$40\% \leq P_{5G} < 50\%$	20,000,000 New Taiwan Dollars
$50\% \leq P_{5G} < 60\%$	25,000,000 New Taiwan Dollars
$60\% \leq P_{5G} < 70\%$	30,000,000 New Taiwan Dollars
$70\% \leq P_{5G} < 80\%$	35,000,000 New Taiwan Dollars
$80\% \leq P_{5G}$	40,000,000 New Taiwan Dollars

- iii. Applicable Duration and Acceptance Deadline: This discount will be applicable until the billing year of 2030, meaning applications for this discount will not be accepted after June 15, 2030.