

Appendix 1

CALCULATION STANDARDS TABLE OF FREQUENCY FOR MOBILE TELECOMMUNICATIONS

1. Payment of the usage fee shall be made annually by the user of mobile communications frequency

= 7,630,000 NT\$/ MHz * Assigned frequency bandwidth (including uplink and downlink bandwidth) * Annual adjustment factor * coverage factor * frequency adjustment factor - discount fee of participate in vertical application service

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:

Designated area 1 coverage (L)	Population coverage for remote villages established with large base station (C)	Remote area 1 coverage factor
L < 50%	C < 85%	1
	85% ≤ C < 90%	1
	90% ≤ C < 95%	1
	95% ≤ C	1
50% ≤ L < 90%	C < 85%	0.995
	85% ≤ C < 90%	0.975
	90% ≤ C < 95%	0.95
	95% ≤ C	0.925
90% ≤ L	C < 85%	0.99
	85% ≤ C < 90%	0.95
	90% ≤ C < 95%	0.9
	95% ≤ C	0.85

Designated area 2 coverage (M)	Remote area 2 coverage factor
M < 20 %	0
20 % ≤ M < 40 %	0.01
40 % ≤ M < 60 %	0.02
60 % ≤ M < 80 %	0.03
80 % ≤ M < 100 %	0.04
M = 100 %	0.05

- i. Coverage factor = Remote area 1 coverage factor - Remote area 2 coverage factor

- 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 “Designated area 1 coverage”, “Designated area 2 coverage” and “Population coverage rate for remote villages established with large base station” 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 in the remote area: If the township meets one of the following conditions, it shall be calculated based on the total population of the village:
 - (i) The village has more than one large base transmission station.
 - (ii) The coverage of electromagnetic wave is more than 85% of the surface area of the township.
- v. Population coverage for remote townships established with large base station: population under the electromagnetic wave out of the total population of townships in remote areas.
- vi. Remote Area is defined by Regulations Governing Universal Service of Telecommunications Enterprises; Large base stations are defined by Regulations for Administration of Base Stations of Public Switched Telecommunications Network; the equipment specifications of the base station adopt a frequency-division duplex mode, with the uplink and downlink bandwidths of 15 MHz, the downlink speed can reach 100Mbps or higher, or adopt a time-division duplex mode, with the bandwidths of 20 MHz, the downlink speed can reach 100Mbps or higher.

(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. Discount fee of participate in vertical application service:

(1)In order to promote the development of innovative vertical applications, the telecommunications enterprise cooperated with specific field demanders and providing vertical application services on the frequencies obtained through auctions, may submit an application before January 31 of each year, and after examination by the competent authority, the discount fees of participate in vertical application service can be determined for the current year according to the following calculation methods. The application method, examination and confirmation shall be determined by the competent authority.

The aforementioned innovative vertical application service areas combine with field owners to provide application services covering hardware, software, and cloud services, such as unmanned driving, drones, smart factories, smart medical care, smart agriculture, smart cities, etc.

(2)The discount fee for participating in vertical application services shall be the contract amount of the cooperation agreement proposed by the telecommunications enterprise with the specific field demanders one year before the billing year multiplied by the discount ratio of the current year; the discount rate from 2021 shall be 30%, and the discount rate shall decrease by 5% year by year, and be 10% from 2025 onwards; during the aforementioned implementation period and discount rate, the competent authority shall undertake an annual review of the development situation of innovative vertical applications and cancel discount fees when the

application is mature and stable.

(3)The upper limit of the discount fee for a single industry participate in vertical application services

= 7,630,000 NT\$/ MHz * Assigned frequency bandwidth (including uplink and downlink bandwidth) * Annual adjustment factor * frequency adjustment factor * 0.15