

On the basis of Article 24, paragraph (1) sub-paragraph 3, Article 29 paragraph (3) and Article 31 paragraph (3) of the Electronic Communications Law (“Official Gazette of the Republic of Macedonia” No.39/14, 188/14, 44/15 and 193/15), the Director of the Agency for Electronic Communications on 28.04.2017, enacted the following

**RULES**  
**on the manner of the annual fee**  
**calculation for radio frequency utilization**

**I. GENERAL PROVISIONS**

**Article 1**

These Rules shall govern the manner of the annual fee calculation for radio frequency utilization.

**Article 2**

(1) The annual fee for radio frequency utilization shall be calculated on the basis of the following criteria: the type of the radio service, assigned radio frequency band, assigned radio frequency channels bandwidth, coverage area, the size of the service zone (inhabited place/population), and effective antenna height, the common utilization of the same frequency or combination of the same.

(2) The fee for radio frequency utilization is based on the regulatory principles for objectivity and proportionality and shall be expressed in points.

(3) The value of the point of the fee in Article 1 of this Regulation shall be determined by the Decision made by the director of the Agency based on the Annual work program for the following year comprised a financial plan of the Agency for the following year, within ten days from the adoption of the annual work program for next year and expressed in euros in denars equivalent, according to the average rate of the National Bank of Macedonia on the day of invoicing.

(4) The decision referred to in paragraph 1 of this Article shall be published on the Agency's website and in the "Official Gazette".

**II. FIXED SERVICE**

**Article 3**

(1) For radio frequencies utilization in the fixed service the number of the points shall be determined according to the radio frequency band and assigned radio frequencies channels bandwidth and shall be:

1. For communication point to point, the number of points  $N_{p-p}$  shall be determined according to the following formula:

$$N_{p-p} = 5 \times B \times F$$

- The coefficient B shall be equal to the assigned radio frequency channel bandwidth of the transmitter (Tx) expressed in kHz and divided with 25 KHz.

2. For communication point to multipoint, the number of points  $N_{p-mp}$  shall be determined according to the following formula:

$$N_{p-mp} = 3 \times B \times F$$

- The coefficient B shall be equal to the total assigned radio frequency pair bandwidth (Tx +Rx) expressed in kHz and divided with 25 KHz.
- The coefficient F for point 1. and 2. from this Article shall depend on the radio frequency band and shall amount:

<b>Radio frequency band</b>	<b>F</b>
Up to 29,7 MHz	20
From 29,7 MHz to 960 MHz	5
From 960 MHz to 2300 MHz	0.5
From 2300 MHz to 5000 MHz	0.4
From 5000 MHz to 10000 MHz	0.3
From 10000 MHz to 20000 MHz	0.2
From 20000 MHz to 55000 MHz	0.1
More than 55000	0.05

3. For broadband wireless access (BWA), the number of the points  $N_{bwa}$  shall be determined according to the formula:

$$N_{bwa} = 28 \times B \times F \times R$$

- The coefficient B shall be equal to the total assigned radio frequency channels bandwidth (Rx + Tx) expressed in MHz divided with 1MHz.
- The coefficient F shall depend on radio frequency band and shall amount:

<b>Radio frequency band</b>	<b>F</b>
Up to 3.400 MHz	2
From 3.400 MHz to 4.200 MHz	4
From 5.000 MHz to 20.000 MHz	4
More than 20.000 MHz	2

- The coefficient R shall depend on the size of the service area (inhabited place) and shall amount:

<b>Inhabited place/settlement</b>	<b>R</b>
Territory of the Republic of Macedonia	4
Region 1: Skopje City, Ilinden, Petrovec, Zelenikovo, Studencani, Sopiste, Cucer Sandevo, Aracinovo	2
Region 2: Kumanovo, Lipkovo, S.Nagorice, Rankovce, Kriva Palanka, Kratovo, Stip, Vinica, Sveti Nikole, Kocani, Lozovo, Probistip, cesinovo-Oblesevo, Karbinici, Zrnovci, Berovo, Pehcevo, Delcevo, Makedonska Kamenica	1.2
Region 3: Veles, Caska, Gradsko, Rosoman, Kavadarci, Negotino, Demir Kapija, Strumica, Radovis, Konce, Vasilevo, Bosilevo, Novo Selo, Gevgelija, Valandovo, Bogdanci, Dojran	1
Region 4: Bitola, Prilep, Demir Hisar, Krusevo, Dolneni, Krivogastani, Mogila, Novaci, Resen	1
Region 5: Ohrid, Struga, Debarca, vevcani, Kicevo, M. Brod, Drugovo, Zajac, Oslomej, Vranestica, Plasnica, Debar, Centar Zupa	1
Region 6: Tetovo, Gostivar, Tearce, Jegunovce, Zelino, Brvenica, Bogovinje, Vrapciste, Mavrovo and Rostushe	1.2

4. For audio and/or video signal transmission, the number of points shall be:

- for television	70
- for sound broadcasting	17
- for portable/mobile TV link	105
- for portable/mobile radio link	52

5. For transportable links for electronic communications networks, systems point to point of paragraph 1 of this Article of the Rules, the fee increases to five times.

### **III. LAND MOBILE SERVICE**

#### **Article 4**

For radio frequency utilization in the land mobile service the number of points shall be determined according to the assigned radio frequency channels bandwidth and effective antenna height and shall amount:

1. The total number of points S for radio networks with base stations shall be determined for each frequency pair according to the formula:

$$S = 50 \times (B + K)$$

- The coefficient B shall be equal to the total assigned radio frequency pair bandwidth (Tx+Rx) expressed in kHz and divided with 25 kHz.

- The coefficient K shall depend on maximum effective transmitting antenna height and shall amount:

Heff. Max. (m)	K
Up to 75 m	1.0
From 75 m to 150 m	1.1
From 150 m to 300 m	1.2
From 300 m to 600 m	1.4
More than 600 m	1.5

- for transportable base (repeater) stations the coefficient K takes the highest amount 1.5 and the number of calculated points is three times higher.

2. For utilization of one frequency (simplex), the total number of points shall amount:

$$S = 50 \times B$$

3. For utilization of one frequency (simplex) on the entire territory of the Republic of Macedonia the total number of points S1 shall amount:

$$S1 = 150 \times B$$

4. For utilization of simplex frequency derived from semi-duplex channel the fee shall not be paid.

5. For public mobile communication networks frequency utilization (GSM, DCS 1800, UMTS/IMT 2000, MFCN) the number of points shall be determined according to the assigned radio frequency band of 1MHz and shall amount:

Frequency band	Points
Up to 862 MHz	14350
From 862 MHz to 960 MHz	28700
From 960 MHz to 2300 MHz	21000
From 2300 MHz to 3000 MHz	12000
Above 3000 MHz	5000

6. For public telecommunication DECT network (Digital European Cordless Telecommunication System) the number of points shall be determined according to the assigned radio frequency band and shall amount:

- the assigned radio frequency band of up to 1MHz

## IV. BROADCASTING SERVICE

### Article 5

(1) For radio frequencies utilization in the broadcasting service (VHF and UHF frequency band) the number of points N shall be determined according to the effective transmitting antenna height, size of the service area (inhabited place/population) and common utilization of the same frequency, according to the formula:

$$N = 35 \times A \times G \times Z \times 1/T$$

- The coefficient A shall be:
  - for sound broadcasting      A = 0.1
  - for television per MUX      A = 0.2
  
- The coefficient G shall depend on the size of the service area (inhabited place) and shall be:

Inhabited place	G
Territory of the Republic of Macedonia	18
Skopje	12
Bitola, Kumanovo, Tetovo	9
Veles, Gevgelija, Gostivar, Debar, Kavadarci, Kicevo, Kocani, Negotino, Ohrid, Prilep, Radovis, Struga, Strumica and Stip	6

For other service areas (inhabited places) that are not mentioned in the table the coefficient G=3.

- The coefficient Z shall depend on the number of inhabitants in the service area and shall be:

Number of inhabitants in the service area	Z
Up to 5.000	9
From 5.000 - 10.000	13.5
From 10.000 – 30.000	18
From 30.000 – 50.000	22.5
From 50.000 – 100.000	27
From 100.000 - 500.000	31.5
From 500.000 – 1.000.000	54
More than 1.000.000	90

- The coefficient T is a number of users utilizing the same frequency in the same service area but in different time (time shearing).

(2) For radio frequency utilization for radio program broadcasting in long, medium and short radio waves (LF, MF and HF bands) the number of points shall be

50% of the total number of points N for sound broadcasting determined in paragraph 1 of this Article.

## V. SATELLITE SERVICE

### Article 6

(1) For radio frequency utilization in satellite service the number of points shall be determined according to the assigned radio frequency band and shall be:

1. Fixed Earth Station:

- for radio frequency bandwidth of up to 100 kHz	70
- for radio frequency bandwidth of up to 200 kHz	175
- for radio frequency bandwidth of up to 500 kHz	350
- for radio frequency bandwidth of up to 1 MHz	700
- for radio frequency bandwidth of up to 2 MHz	1750
- for radio frequency bandwidth more than 2 MHz	3.500

2. VSAT main station (HUB Station):

- for radio frequency bandwidth of up to 100 kHz	70
- for radio frequency bandwidth of up to 200 kHz	175
- for radio frequency bandwidth of up to 500 kHz	350
- for radio frequency bandwidth of up to 1 MHz	700
- for radio frequency bandwidth of up to 2 MHz	1750
- for radio frequency bandwidth more than 2 MHz	3.500

3. VSAT terminal:

- for radio frequency bandwidth of up to 100 kHz	35
- for radio frequency bandwidth of up to 200 kHz	70
- for radio frequency bandwidth of up to 500 kHz	175
- for radio frequency bandwidth of up to 1 MHz	350
- for radio frequency bandwidth more than 1 MHz	700

4. SNG satellite station (Satellite News Gathering) 3.500

5. Global mobile personal communication systems (GMPCS):

- for assigned radio frequency bandwidth of up to 1MHz	350
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(2) For temporary radio frequency utilization for VSAT/ SNG the number of points regardless of the assigned bandwidth shall amount:

- for VSAT terminal	87
- for SNG satellite station	350

**VI. AERONAUTICAL, RADIO NAVIGATION AND  
INLAND NAVIGATION SERVICE**

**Article 7**

(1) The number of points for radio frequency utilization in the aeronautical and radio-navigation service and for inland navigation service shall be determined according to the type of radio station and shall amount:

- for radio station on land 14
- for radio station in the aircraft with maximum take-off mass of 2.750 kg – 14  
5.700 kg
- for radio station in the aircraft with maximum take-off mass of more than 350  
5.700 kg
- for radio station for navigation, identification, location determination, 14  
signalization etc.
- for radio station on the vessels for inland navigation 7

**VII. SERVICES FOR SPECIAL PURPOSE**

**Article 8**

For radio frequency utilisation for emergency services for medical assistance and other health care organisations, fire services and rescue services the fee shall be paid in the amount of 10% of the total number of points calculated in the corresponding radio service.

**VIII. TRANSFERRING OR LEASING OF THE RIGHT FOR USE OF RADIO  
FREQUENCIES**

**Article 9**

The holder of the authorisation for use of radio frequencies, that have lost the right to use them due to transferring or leasing of the right for use of radio frequencies, based on previously paid all the fees he was obligated to pay, shall be reimbursed by the Agency for the portion of the paid annual fee for use of radio frequencies for the full months of the calendar year when the assigned radio frequencies have not been used, calculated in such a way that the remaining months are multiplied by one twelfth of the paid annual fee.

## **IX. AMENDMENT OF THE AUTHORISATION FOR USE OF RADIO FREQUENCIES**

### **Article 10**

The holder of the authorisation for use of radio frequencies, that have lost the right to use them due to amendment of the right for use of radio frequencies, ex officio or by request from the holder, shall be reimbursed by the Agency for the portion of the paid annual fee for use of radio frequencies for the full months of the calendar year when the assigned radio frequencies have not been used, calculated in such a way that the remaining months are multiplied by one twelfth of the paid annual fee.

## **X. TEMPORARY RADIO FREQUENCY UTILIZATION**

### **Article 11**

By exception of Article 1 of these Rules on radio frequency utilization, for temporary authorizations for use of radio frequencies the number of points shall amount 10% of the total number of point calculated in the concerned radio service.

## **XI. TERMS OF PAYMENT**

### **Article 10**

- (1) The radio frequency utilization fee shall be paid in advance for each current year on the account of the Agency for Electronic Communications, starting from the date of validity of the Authorization for radio frequency utilization.
- (2) The annual fee for use of radio frequencies shall not be paid by the state management bodies, by the Public Enterprise Macedonian Broadcasting for transmission of radio-television programme services of the Public Enterprise Macedonian Radio Television, radio-amateurs, and users of the citizens band radio (CB).
- (3) If the Agency revokes the authorization for use of radio frequencies ex officio, fees for use of radio frequencies that have been paid are not reimbursable.

## **X. FINAL PROVISIONS**

### **Article 11**

On the day of entry into force of these Rules, the Rules on the manner of the annual fee calculation for radio frequency utilization, published in the "Official Gazette of the Republic of Macedonia" No.161/2014 shall cease to be valid.



## **Article 12**

These Rules shall enter into force the following day of their publication in the “Official Gazette of the Republic of Macedonia”.

Following their entry into force, these Rules shall be published on the Agency’s web-site.

No. 0101-1311/4  
Skopje, 28.04.2017

**Director**  
**Saso Dimitrijoski**