



## Bureau Telecommunicatie en Post

Application form for the installing, maintaining and operating of a wireless network in the 2.4GHz, 3.4 -3.6GHz, 5.0GHz and the 17.0GHz frequency bands.

### Registration of personal data:

1. What is the business form of the person/company applying for authorization?		
Natural person	<input type="checkbox"/>	Continue to complete table 2a.
Legal person	<input type="checkbox"/>	Continue to complete table 2b.
Public corporation	<input type="checkbox"/>	Continue to complete table 2b.

2a. Natural person		
Name: .....		
Address: .....		
Place of residence: .....		
Date of birth:	Place of birth:	Identity number:
.....	.....	.....
Telephone number:	Fax number:	E-mail address:
.....	.....	.....
Together with this list you must submit:		
A certificate of good behavior. <input type="checkbox"/> Tick off this box in case you are submitting a copy.		

*To be completed by the person/company applying for authorization*

Signature:	Place:	Date:
.....	.....	.....



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### Registration of personal data:

2b. data of the legal person or public corporation		
* What is the legal form of the company? ..... .....		
* Name of the company as registered with the Chamber of Commerce: ..... .....		
* Trading name of the company (if applicable): .....	* Number of registration with the Chamber of Commerce (add certificate of registration): .....	
* Together with this list you must submit:		
A copy of the Articles of Incorporation of the company. <input type="checkbox"/> Tick off this box if you are submitting a copy.	A copy of the business permits. <input type="checkbox"/> Tick off this box if you are submitting a copy.	
A copy of the certificate of good behavior of the managing director of the company. <input type="checkbox"/> Tick off this box if you are submitting a copy.		
** Name of the department: ..... .....		
Name of Island Territory: ..... .....		
Address: ..... ..... .....		
Name of the contact person: .....	Position: .....	
Telephone number: .....	Fax number: .....	E-mail address: .....

\* Only a private company must complete these sections.

\*\* This section must be completed only by a public corporation.

*To be completed by the person/company applying for authorization.*

Signature:	Place:	Date:



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**Technical specifications per transmitting location** (see page 7 for explanation):

<b>3. In what frequency band will the system be implemented?</b>			
<input type="checkbox"/> 2400 t/m 2483.5 MHz	<input type="checkbox"/> 5470 t/m 5725 MHz		
<input type="checkbox"/> 3400 t/m 3600 MHz	<input type="checkbox"/> 5725 t/m 5850 MHz		
<input type="checkbox"/> 5150 t/m 5350 MHz	<input type="checkbox"/> 17100 t/m 17300 MHz		
<b>4. Aan welke standaard voldoet de gebruikte apparatuur?</b>			
<input type="checkbox"/> IEEE 802.11 / b	<input type="checkbox"/> IEEE 802.16	<input type="checkbox"/> HiperLink	
<input type="checkbox"/> IEEE 802.11a	<input type="checkbox"/> HiperAccess	<input type="checkbox"/> HiperLAN 1 of 2	
<b>5. a What modulation technique does the system use for Point-to-Point connections?</b>			
<input type="checkbox"/> FHSS	<input type="checkbox"/> DSSS	<input type="checkbox"/> OFDM	<input type="checkbox"/> TDMA/TDD
<b>5. b What modulation technique does the system use for Point-to-Multipoint connections?</b>			
<input type="checkbox"/> FHSS	<input type="checkbox"/> OFDM	<input type="checkbox"/> TDMA/TDD	<input type="checkbox"/>
<b>6. For FHSS system the under mentioned data must be stated.</b>			
A Dynamic Frequency Selection (b, c en d do not fill in b, c and d)	<input type="text"/>		
B Hopping Sequence Set	<input type="text"/>		
C Hopping Index	<input type="text"/>		
D Hopping Pattern	<input type="text"/>		
E Hopping rate	<input type="text"/> ms.		
F The Dwell Time	<input type="text"/> ms.		
G The band width of the hopping channels	<input type="text"/> MHz		
<b>7. For DSSS, OFDM and TDMA/TDD systems the under mentioned data must be stated.</b>			
Central Channel Frequency	<input type="text"/> MHz		





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**Technical specifications per transmitting location** (see page 7 for explanation):

### 9. A graphic representation of the network configuration including the geographical coordinates of the transmitting locations.

This graphic representation must contain:

All point-to-point connections;

Indicate all distribution points (omni, sectorial) coverage areas:

### 10. What is the transmission speed of the various point-to-point connections in the wireless network?

1.		Mb/s
2.		Mb/s
3.		Mb/s
4.		Mb/s
5.		Mb/s
6.		Mb/s
7.		Mb/s
8.		Mb/s
9.		Mb/s

### 11. What is the transmission speed to the clients (distribution points)?

1.		Mb/s
2.		Mb/s
3.		Mb/s
4.		Mb/s
5.		Mb/s
6.		Mb/s
7.		Mb/s
8.		Mb/s

### 12. What is the capacity of the system?

### 13. Is this a private or public network?



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### Economic aspects of the project:

14. Economic aspects:	
1.	Business plan (to be submitted)
2.	A letter of guarantee issued by a Bank or Financier of the project

### Services:

15. Indicate what type of services are provided via the network:	
1.	
2.	
3.	
4.	
5.	
6.	
7.	
8.	
9.	
10.	

*To be completed by an employee of Bureau Telecommunicatie & Post.*

*Prior to signing for receipt the Bureau Telecommunicatie & Post employee must ascertain that the under mentioned documents have been added to this list. Tick off the respective boxes:*

- |  |  |
|--|--|
| <input type="checkbox"/> An excerpt of the certificate of registration with the Chamber of Commerce; | <input type="checkbox"/> Graphic representation of the installation; |
| <input type="checkbox"/> Copy of the articles of Incorporation of the company;                       | <input type="checkbox"/> Technical description of the project;       |
| <input type="checkbox"/> Copy of the business permit of the company;                                 | <input type="checkbox"/> Certificate of good behavior;               |
| <input type="checkbox"/> Folder with technical information regarding the equipment;                  | <input type="checkbox"/> Business plan;                              |
|  | <input type="checkbox"/> Letter of guarantee.                        |

Date received:	Signature of an employee of Bureau Telecommunicatie & Post :	Bureau Telecommunicatie & post seal:



## **Bureau Telecommunicatie en Post**

*Application form for the installing, maintaining and operating of a wireless network in the 2.4GHz, 3.4 -3.6GHz, 5.0GHz and the 17.0GHz frequency bands.*

### **Explanation:**

1. Legal form of the authorization/license application.
2. Information regarding the authorization/license application.  
The excerpt from the register of the Chamber of Commerce may not be older than three months.
3. The Netherlands Antilles adheres to the frequency distribution in accordance with the FCC part 15.247 and 15.401, CEPT T/R 10-01 and CEPT/ERC/REC 14-03.  
The equipment to be applied must conform to FCC part 15.247 of 15.407 or to ETSI 300-328.

FCC: 2.4 GHz band	2400 - 2483.5 MHz;	CEPT: 2.4 GHz band	2400 - 2483.5 MHz;
5.0 GHz band	5150 - 5350 MHz;	5.0 GHz band	5150 - 5350 MHz;
	5725 - 5850 MHz.		5470 - 5725 MHz;
		17.0 GHz band	17100 - 17300 MHz.

CEPT 14-03 E for 3.4 GHz band.

In the Netherlands Antilles an authorization or license must be obtained for the use of these frequency bands.

4. The equipment to be applied must conform to the norms described in the IEEE 802.11, 802.11b, 802.11a, 802.16 standards or to HiperLAN/1, HiperLAN/2, HiperAccess en de HiperLink standards.

In case equipment is used which conforms to one of the HiperLAN norms, the system must make use of Dynamic Frequency Selection.

5. For point-to-point connections one of the following modulation techniques must be used, viz. Frequency Hopping Spread Spectrum (FHSS), Direct Sequence Spread Spectrum (DSSS), Orthogonal Frequency Division Modulation (OFDM) or Time Division Duplex (TDD).

For Point-to-Multipoint connections FHSS, OFDM or TDD must be used.

6. In case FHSS is used, a hopping channel must not be occupied for a period longer than 0.4 sec. within a period of 30 sec.

FHSS, DSSS and OFDM technical aspects according to IEEE 802.11, 802.11a. TDD according to IEEE 802.16

In case of FHSS techniques that make use of Dynamic Frequency Selection, the sections b, c, and d need not be filled in.

7. Statement of the Channel Center Frequency.



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8. Here, the brand name per apparatus that is used in the transmitting location must be stated. A copy of a folder or a folder with technical specifications must be submitted to the Bureau Telecommunicatie & Post. Examples of apparatus are:
- a. Routers;
  - b. Radio modems;
  - c. Bridge;
  - d. Switch;
  - e. Antenna.

A technical description must be given of the project, including the following:

- How the applicant intends to guarantee the technical quality of the network;
- Description of the equipment to be used per transmitting location;
- Technical data of the antenna to be used (in the network and at the client's premises);
- What frequency bands will be used by the system for the various connections (specify per connection);
- Indicate transmission speed per connection;
- What modulation techniques will be used by the system (specify per connection);
- How the applicant will take care of and deal with the security of the network;
- Description of the services to be provided;
- Indicate if a public network or a private network is involved;
- Indicate how accounts will be settled with the clients for the services provided (no amounts but, e.g. flat rates, per service, or band width);

Use graphic representation to support your description.

9. Requirements with regards to the antenna to be used;
- a. Maximum transmitting power according to FCC part 15.247 and 15.407 (1W);
  - b. Antenna gain 6 dBi according to FCC part 15 (inside);
  - c. Antenna gain 24 dBi (outside).

Collocation: in case DSSS is used, 3 different systems (access points) can be installed in the same mast. In case FHSS is used, 15 different systems (access points) can be installed in the same mast.

Map with geographical coordinates of the transmitting locations to be used.

- d. Indicate point-to-Point connections;
- e. Indicate the coverage area of the omnidirectional and sectorial antennas.

10. Indicate the transmission speed of the point-to-point connections in the wireless network.

11. The transmission speed towards clients: depending on the connection, this can be a point-to-point or point-to-multipoint connection in the direction of the client.



## ***Bureau Telecommunicatie en Post***

*Application form for the installing, maintaining and operating of a wireless network in the 2.4GHz, 3.4 -3.6GHz, 5.0GHz and the 17.0GHz frequency bands.*

12. Capacity of the network: number of private individuals or companies that could be connected to the wireless network.
13. A private network is intended for a specific target group. A public network must to guarantee the
14. The business plan must contain a clear description how the applicant intends to guarantee the quality of service.  
The bank guarantee must specify the cost that are fully covered for the purpose of setting up the project.
15. Some examples of the services:
  - a. Access to the internet;
  - b. VoIP;
  - c. Video streaming.