COSMOTE
One world, better for all.

Speedport Plus

Instruction manual

OTE GROUP OF COMPANIES

Hellenic Telecommunications Organization S.A.
www.ote.gr

Contents

Chapter 1 Safety Precautions

Please note the following advices, in order to avoid physical injury!

Never open Speedport or the mains plug by yourself.

Never touch the plug contacts with pointed metallic items.

Never install Speedport during a thunderstorm. Never connect or loosen electrical connections in order to avoid the danger of an electrical shock.

Always install the electrical ducts, so no one can tread on them or stumble.

Just operate Speedport with the included mains plug and just connect it to sockets, which correspond to the standards stated on the identification label. Never touch the mains plug with wet hands.

Always note the following warnings for installation, setup and operation of Speedport!

Put Speedport on an anti-slip surface

Place Speedport away from heat sources, direct sunlight and other electrical devices.

Do not place Speedport on heat sensitive surfaces.

Protect Speedport from moisture, dust, liquids and steams.

Do not store or place Speedport in humid places (i.e. bathroom) or in hazardous areas.

Never place items on Speedport. The vent openings on Speedport are necessary for cooling and must not be covered.

Connect Speedport only to the appropriate sockets. Just connect authorized accessories to Speedport.

Wipe Speedport just with a soft, dry and anti-static cleaning cloth.

Do not use cleaning agents on Speedport.

Never disconnect Speedport from the power source or from its broadband connection during an automatic configuration or a firmware update. The following loss of data may cause malfunctioning of your Speedport.

Speedport may just be repaired by authorized service personnel.

Note: Always choose secure passwords! Especially for the device password of Speedport, the internet access and the wireless home network.

OTE S.A. cannot be hold responsible for damages resulting from improper use of the device!

Chapter 2 Overview

2.1 Product Introduction

Speedport Plus is a broadband router with integrated DSL modem and makes the connectivity to the internet via VDSL2 (17a &35 b)and ADSL2+ possible. Speedport carries out the connection setup for all affiliated devices.
For the use in the tethered home network (LAN) up to four devices can be attached to the LAN plugs of Speedport (by default, LAN4 is dedicated for IPTV). The devices can communicate with each other within the home network. Speedport supports wireless (WLAN) as well as tethered home networks (LAN).
USB-Storages, which are connected to Speedport can be used for the easy exchange of media data and as network storages.
Speedport also offers the functions of a telephone device for internet phone calls. You can attach two tethered analogue end devices such as telephone, answering machines or fax devices.

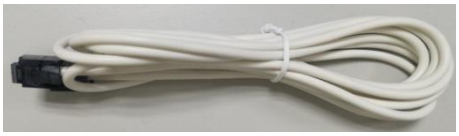
Note: Brands or trade names, which are mentioned in this manual serve the description of the instruction step, which does not mean they are available without royalties. They remain under all circumstances the property of their respective right owner.

2.2.**Packing List**

Check package content.

Unpack your Speedport and check package content on completeness.

Table 2-1 Packing List

Componant Name	Count	Image
Speedport Plus	1	
Mains plug	1	
RJ45/RJ45, yellow plugs	1	
RJ11/RJ11, blue plugs	1	
RJ11/RJ11, grey plugs	1	
RJ11/RJ11, grey plugs twisted-pair	1	

Splitter	1	
Filter	1	
2-female to 1-male RJ11 converter	1	

Before you start using your Speedport please check it carefully on damages

on the package, which indicate that your Speedport has been damaged during transport!

on the housing, the mains plug or the connection cables!

Do not use Speedport under any circumstances, once you learn that it has been damaged!

In case of doubt contact the Customer Service of OTE.

2.3.**Product Features**

Speedport supports the following features:

Speedport Plus is a IAD product for European ISP.

Speedport Plus features are VDSL2 with built-in 2x2 2.4GHz and 5GHz 11ac access point and FXS interface, its flexibility can meet European ISP requirements of different European market.

Speedport Plus support 4 ports 10/100/1000 Mbps Ethernet, and 1 USB.

The WAN interface of Speedport Plus is one VDSL2/ADSL2+ port.

Speedport Plus supports 2.4GHz and 5Ghz 11n standard, 4 Giga Ethernet LAN and LAN 1 is configurable to WAN, 3 ports RJ11, 1 port USB 2.0 with 7 LED indicators and 3 button (WLAN/ WPS/Reset).

Wireless Wi-Fi connection (WLAN 802.11 a/b/g/n/ac)

WLAN security through encryption (WEP/WPA/WPA2)

2.4.Interfaces and Buttons

Table 2-2 Interfaces and Buttons

Interface/Button	Description
Power	Power jacket
Reset	In Power-on state, press for at least five seconds into the opening on the backside of your Speedport labeled with Reset.
DSL	RJ-11 xDSL port
LAN1-LAN4	Use standard LAN cables (RJ45 connectors) to connect the local network.
Phone1-Phone2	Use the RJ11 cable to connect analog phone for VoIP Telephony service. The Telephony Service is not available.

2.5.Indicators

Table 2-3 Indicators on the Front Panel

LED Name	Color(s)	Display Status	Description
Power	White	White on for 0.5 sec	Initializing Self Test (e.g. I just plugged in the power cord, could be some starting process.)
			Reset to factory settings (not necessary if "Initializing Self Test" starts within 2 seconds after Reset is initialized)
		Lights	Power On
	Red	Red blinking twice/sec	Self-test failure
			Update critical failure (recovery necessary)
			Recovery mode (only if applicable, see spec. documents)
		Lights	status seems to be critical
DSL	White	White on for 0.5 sec	Initializing Self Test (e.g. I just plugged in the

			power cord, could be some starting process.)
			Reset to factory settings (not necessary if "Initializing Self Test" starts within 2 seconds after Reset is initialized)
		Lights	DSL-Port Synchronized OR Link-Port connected with ONT or modem (DSL/Link must be on to carry on with the next step. If DSL Device must be connected to TAE.)
		White blinking twice/sec	Recovery mode (only if applicable, see spec. documents)
Online	White	White on for 0.5 sec.	Initializing Self Test (e.g. I just plugged in the power cord, could be some starting process.)
			Reset to factory settings (not necessary if "Initializing Self Test" starts within 2 seconds after Reset is initialized)
		Lights	PPPoE established with user credentials (all providers), not with e.g. default credentials or walled garden credentials. Default credentials or walled garden credentials. (e.g. I am online, I can surf the web and use the internet.)
		White blinking twice/sec	Recovery mode (only if applicable, see spec. documents)
WLAN	White	White on for 0.5 sec	Initializing Self Test (e.g. I just plugged in the power cord, could be some starting process.)
			Reset to factory settings (not necessary if "Initializing Self Test" starts within 2 seconds after Reset is initialized)
		Lights	WLAN On
		White blinking twice/sec	Recovery mode (only if applicable, see spec. documents)
Telephony	White	White on for 0.5 sec.	Initializing Self Test (e.g. I just plugged in the power cord, could be some starting process.)
			Reset to factory settings (not necessary if

			"Initializing Self Test" starts within 2 seconds after Reset is initialized)
		Lights	Telephony ready to use (ISDN / analogue / VoiP)
		White blinking twice/sec	Recovery mode (only if applicable, see spec. documents)
	The Telephony service is not available.		
Service	Yellow	Yellow on for 0.5 sec.	Initializing Self Test (e.g. I just plugged in the power cord, could be some starting process.)
			Reset to factory settings (not necessary if "Initializing Self Test" starts within 2 seconds after Reset is initialized)
		Yellow blinking twice/sec	Triggered by ACS or HG (please wait until it goes off. Then, carry on configuring the device.)

Caution: Never disconnect your Speedport from the power source or the broadband connection during a firmware update. This may result in data loss causing a possible malfunction of your device.

The signals for the status will be given a maximum of 300 seconds. If after that time the display screen is needed for another status signal, the signal of the first status is interrupted and replaced by the new status signal. This may for example occur if the error signal for WPS (automatic balance) is displayed.

2.6. Technical Specifications

Table 2-4 Technical Specifications

Item	Specifications
DSL\Standard	ADSL, ADSL2, ADSL2+, VDSL, VDSL2
1 DSL	RJ11
4 LAN	RJ-45, 10/100/1000 auto MDI/MDIX
1 USB	USB 1.0 / 1.1 / 2.0
WLAN Standard	IEEE 802.11b/g/n/ac
Frequency area	2.400 - 2.4835 GHz (IEEE 802.11b/g/n) 5.180 - 5.700 GHz (IEEE 802.11a/n/ac)

Radio channels	13 at IEEE 802.11b/g/n (2,4 GHz), 16 at IEEE 802.11n (5 GHz)
Max. Clients	253 (WLAN: 32)
Max. Range	around 30 m in buildings around 150 m in the open with indivisibility
Transmission rate Wireless	IEEE 802.11b: up to 11 Mbps IEEE 802.11g: up to 54 Mbps IEEE 802.11a: up to 54 Mbps IEEE 802.11n: up to 300 Mbps IEEE 802.11ac: up to866 Mbps
Internet Browser	Microsoft Internet Explorer ab Version 9.0, Mozilla Firefox ab Version 13.0, Safari
Security	WPA/WPA2, WEP 64bit / 128 bit, MAC-Filter, NAT, Firewall
Voltage	see type label of mains adapter
Possible environmental temperature	0 °C to 40 °C ; with 5 % to 95 % relative air humidity
Dimensions	around 246 x 158 x 82 mm
Weight	around 600 g
Certification	CE certification

Chapter 3 Configuration Preparation

Place Speedport

The position where you place your Speedport should be near an electrical socket.

You can put your Speedport on a surface or hang it on the wall.

Please note the following:

· Place your Speedport in a dry and dustfree location with no direct sunlight exposure.

· Always use the included fastener for placing or hanging Speedport. Without the fastener the devices looses stability.

· Please note the maximum cable length when you are connected to Speedport.

· If you want to set up a connection between your network capable device and Speedport, place your Speedport in a central position or above table height.

· Radio waves are weakened by items or walls, which is why Speedport position should be chosen in a location where no obstacles can disrupt the connection.

· Please keep enough distance to sources of disruption such as microwaves or electrical devices with big metal housing.

Advise: Modern furniture is often covered with a variety of layers of varnish or synthetics. Therefore it is also treated with different agents for varnish maintenance. It might be that some of these materials contain components, which corrode or soften the rubber feet of your Speedport. The corroded feet can rub of on the surface of furniture. It might also be that temperature sensitive surfaces get damaged due to heat development caused by your Speedport.

Connect Speedport.

Your Speedport is a high quality product, which will just work to your full satisfaction, if all necessary conditions for operation are met. So please follow the instruction carefully, while you connect your Speedport.

Notice: As soon as your Speedport has been connected to the mains power and to the broadband, the software may be updated automatically (firmware update). In this case, please **do not disconnect** the device from AC mains or remove the xDSL cable while it is automatically updating its software (Service LED blinking) until the 'Service' LED stops blinking.

Suggestion: Please take a look on the following pages where detailed information is presented regarding Speedport's GUI administration.

3.1 Hardware Connection

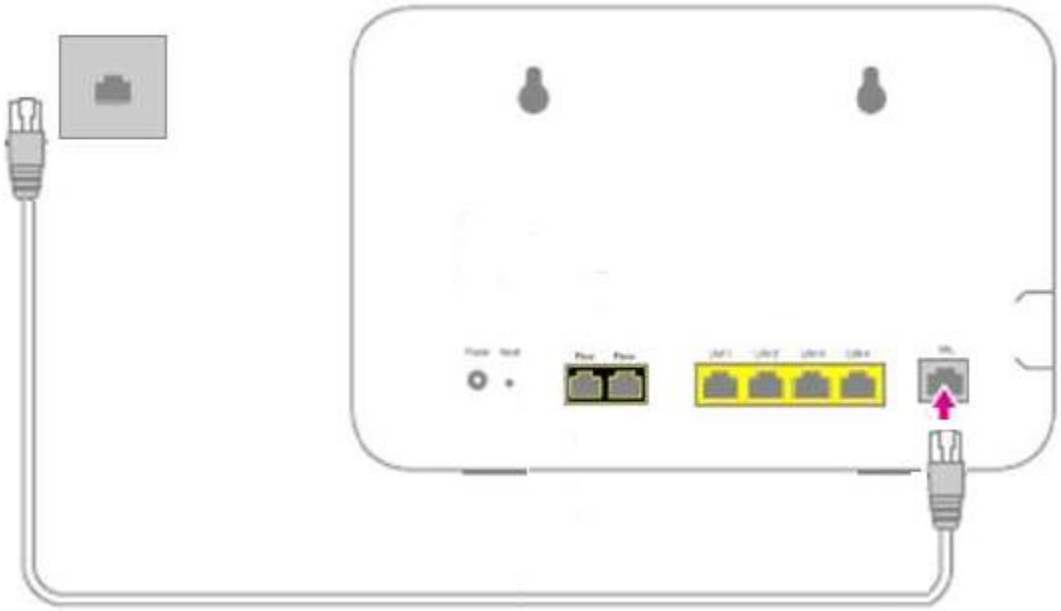
Notice: Please carry out the installation of Speedport in the following order. With this procedure, you can be sure that your Speedport is automatically equipped with the newest operation software and it is ready for use.

Connect broadband.

Connect the RJ11 plug of the telephone plug in your household to the DSL plug on your Speedport (RJ11/RJ11, grey plug).

Figure 3-1 Seperator Connection

Telephone plug Speedport Plus

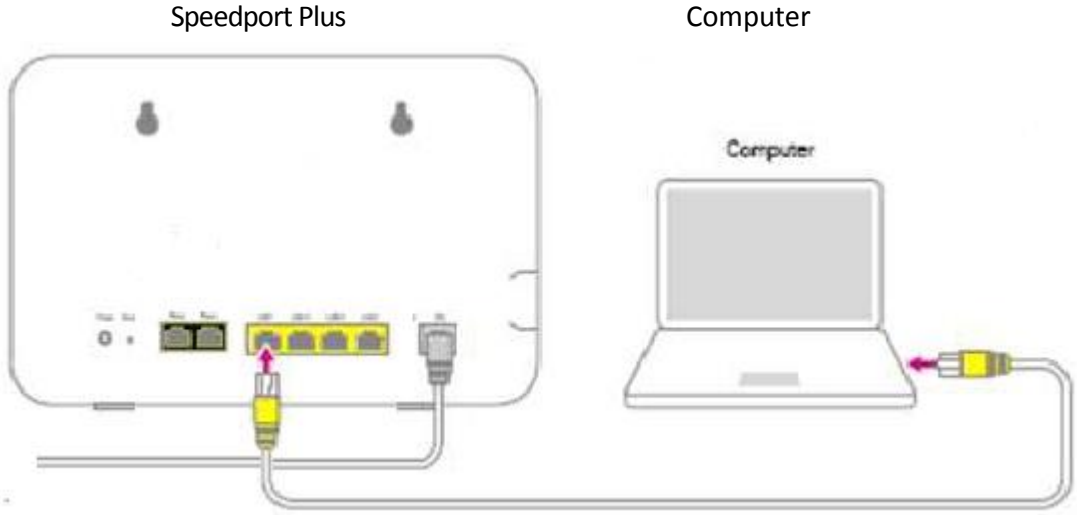


Notice: If you use a broadband connection with splitter, connect the DSL plug of the splitter and the DSL plug of your Speedport with the DSL cable for the connection with splitter (RJ11/RJ11, grey plug).

Connect Computer.

Connect one of the LAN ports of your Speedport to the LAN interface of your personal computer/laptop (yellow plug).

Figure 3-2 LAN Interface Connection

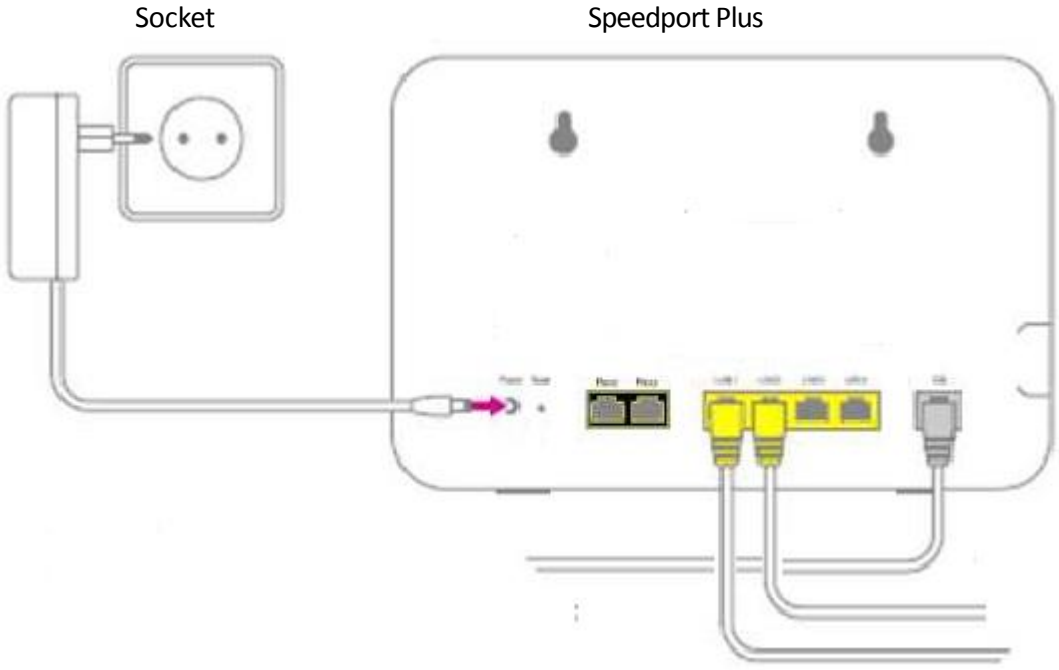


Suggestion: The procedure on how to connect Wi-Fi capable devices with Speedport is presented at **Quick Installation Guide** and inside chapter **Connect devices with WLAN** of this instruction manual.

Connect mains plug.

Connect Speedport with the AC mains.

Figure 3-4 Power Supply Connection



Notice: Just connect your Speedport with the included mains plug.

Your Speedport starts to boot. The LED 'Power' blinks until the preparation is finished.

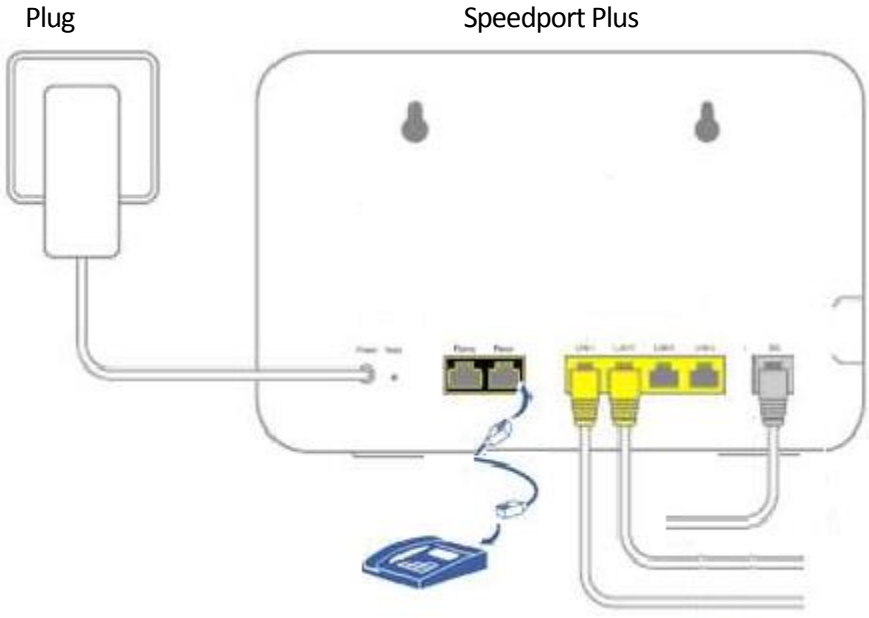
Notice: Do not disconnect your Speedport from the power source, please wait until the LED 'Power' stops blinking. An interruption of the boot procedure can damage your Speedport!

Connect telephone. (The Telephony service is not available).

You can connect up to two analogue end devices (i.e. fax device, analogue phones) to your Speedport.

Connect analogue telephone

Figure 3-5 Telephone Connection



1. Connect your analogue telephone, fax machine or answering machine to the Phone port 1 or 2 of your Speedport.
2. Details on configuring Telephony functions are presented in a later chapter.

Notice: In case of power blackout, no calls can be made through the end devices attached to your Speedport Phone ports.

Mount your Speedport to the wall.

After connecting all cables, you can attach your Speedport to the wall.

1. Mount two screws (not included in the package) to the wall.

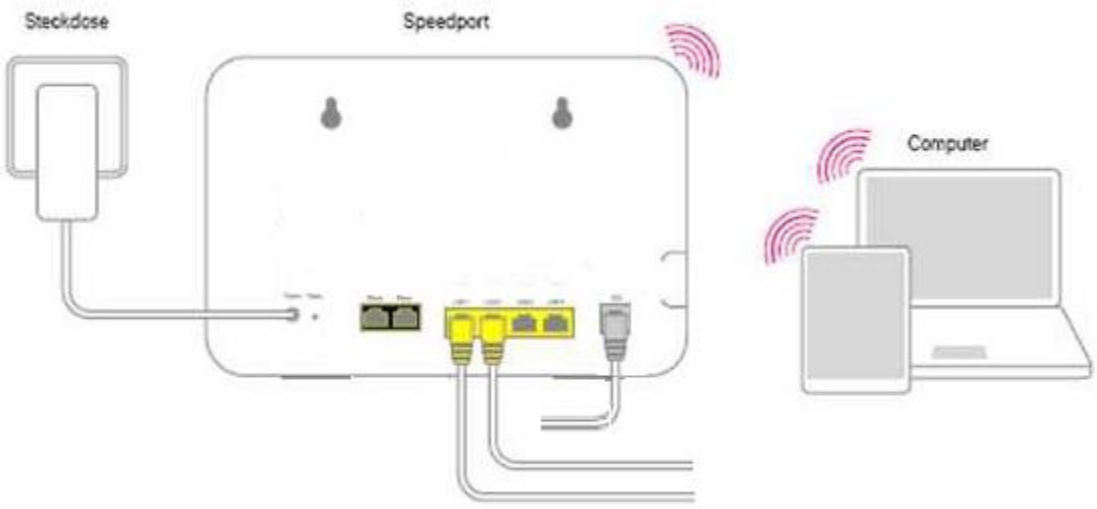
Suggestion: Use the marks on the backside of your Speedport as template for marking the drill holes.

2. Hang your Speedport on the fixed screws.

Connect devices with WLAN.

In a wireless home network (WLAN) the connection between the devices is established by radio waves. The devices have to be equipped with a WLAN adapter in accordance with standard IEEE 802.11b, IEEE 802.11g or IEEE 802.11n. Modern devices normally include an internal WLAN adapter.

Figure 3-6 WLAN Connection



The way to connect network capable devices via WLAN with your Speedport Plus may be different, depending on the operation system in use. The following current operation systems will be described here:

· Windows 10
· Windows 8
· Windows 7
· OS X Mountain Lion
· OS X Lion
· iOS 6
· Android 4

For connection of your network capable devices via WLAN to your Speedport, the WLAN function on Speedport and on the devices has to be activated.

Suggestion: Activate the WLAN function of your Speedport by pushing the WLAN button (less than five seconds) on the front side of your Speedport; the display WLAN has to be illuminated. WPS function is activated by pressing the WLAN button for more than five seconds.

Connect Windows 8 via WLAN.

If you have Windows 8 installed in your device, please carry out the following steps:

1. Open the Charms-Bar.
2. Click on Settings.
3. Click on the WLAN symbol.
4. Click on the WLAN name (SSID) of your Speedport.

Suggestion: In its delivery status the WLAN name (SSID) is the same as the one printed on the back side label of your Speedport device.

5 Click on Connecting.
6. Key in the WLAN key of your Speedport in the entry field.

Suggestion: In its delivery status the WLAN key is printed on the back side label of your Speedport device.

7. Click on Forward.
8. Choose between public networks and home or business networks.

Connect Windows 7 via WLAN.

If you use the operation system Windows 7 on your device, please carry out the following steps:

1. Click in the start menu on the remark system operation.
2. Click on the remark network and internet.
3. Click under the submenu centre for network and clearance on establish connection to a network.
4. Click on the **WLAN name** (SSID) of your Speedport.

Suggestion: In its delivery status the WLAN name (SSID) is the same as the one printed on the back side label of your Speedport device.

5. Click on establish connection.
6. Enter the WLAN key of your Speedport into the entry field.

Suggestion: In its delivery status the WLAN key is printed on the back side label of your Speedport device.

7. Click on **Connecting**.
8. Choose between **public network** and **home or business network.**

Connect OS X Mountain Lion / Lion via WLAN.

If you use the operation system OS X Mountain Lion or OS X Lion on your device, please carry out the following steps:

1. Click on the **WLAN symbol** in the menu bar.
2. Click on the statement **activate WLAN**.
3. Click on the **WLAN name** (SSID) of your Speedport.

Suggestion: In its delivery status the WLAN name (SSID) is the same as the one printed on the back side label of your Speedport device.

4. Enter the **WLAN key** of your Speedport in the entry field.

Suggestion: In its delivery status the WLAN key is printed on the back side label of your Speedport device.

Connect iOS 6 via WLAN.

If you use the operating system iOS 6 on your device, please carry out the following steps:

1. Click on icon **Settings**.
2. Click on the entry **WLAN**.
3. Activate the **WLAN function**.
4. Click on the **WLAN name** (SSID) of your Speedport.

Suggestion: In its delivery status the WLAN name (SSID) is the same as the one printed on the back side label of your Speedport device.

5. Key in the **WLAN key** of your Speedport in the input box.

Suggestion: In its delivery status the WLAN key is printed on the back side label of your Speedport device.

6. Click on **Connecting**.

Connect Android 4 via WLAN.

If you use the operation system Android 4 on your device, please carry out the following steps:

1. Tip on the icon **Settings**.
2. Tip on the statement **WLAN**.

3. Activate the **WLAN function**.
4. Tip on the **WLAN name** (SSID) of your Speedport.

Suggestion: In its delivery status the WLAN name (SSID) is the same as the one printed on the back side label of your Speedport device.

5. Enter the **WLAN key** of your Speedport in the entry field.

Suggestion: In its delivery status the WLAN key is printed on the back side label of your Speedport device.

6. Tip on **Connecting**.

Install your Speedport.

With your Speedport all your connected computer and network capable devices can access the internet at the same time.

Therefore, internet access data and internet telephony access data (VoIP) parameters have to be entered in Speedport's configuration application.

The configuration application of Speedport is a user interface based on an internet browser.

For the first installation of your Speedport you will be lead through the configuration. For that you will receive detailed information about the steps, which are to be carried out.

Suggestion: We suggest using the **automatic configuration**.

Use the internet browser, which has been installed on your device.

The procedure is identical for all internet browsers. For example we suggest the Microsoft Internet Explorer version 9.0 or above, Mozilla Firefox starting from version 13 or Safari.

Requirements for configuration.

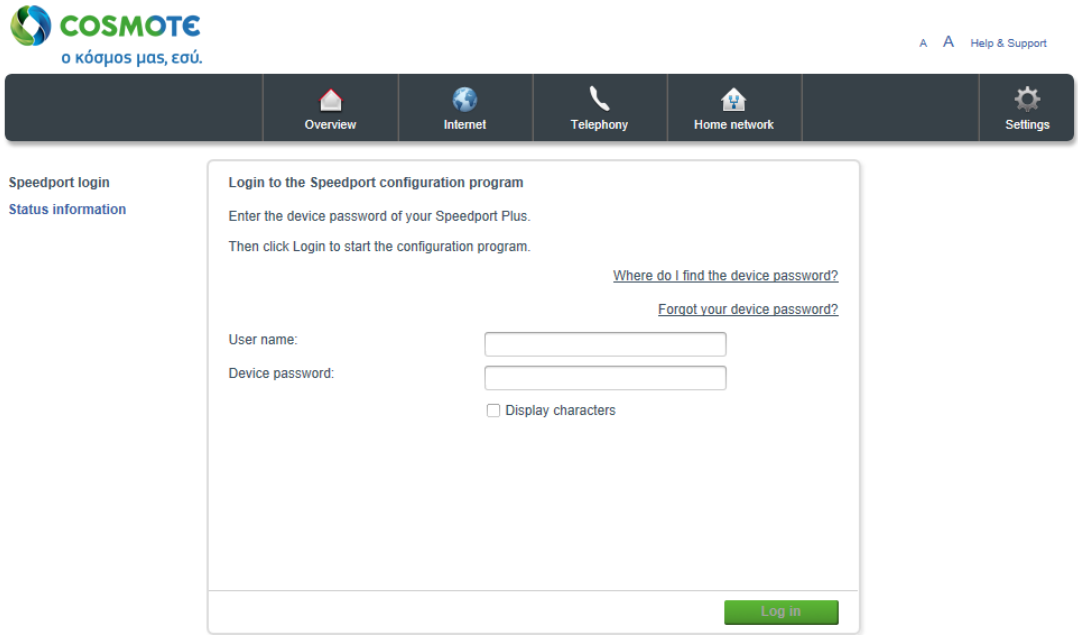
· You have installed your Speedport and checked the network configuration of your PC/Laptop/Mac.

· The network capable device has established a connection with Speedport (through WLAN or LAN).

3.2 Logging In to the Device

Login for Speedport configuration program.

Figure 3- 7 Login



1. Clickon theentryfieldandkeyinthe device username and password(in the delivery status the device passwordis displayed on the bottom-side label of the device).

2. Click on the tab Log in . After a short while the starting page of the configuration program for your Speedport will be displayed.

Notice: After entering an incorrect 'admin' password, the idle time for reentering the password will be doubled. That is to protect your Speedport against unauthorized access to your configuration data.

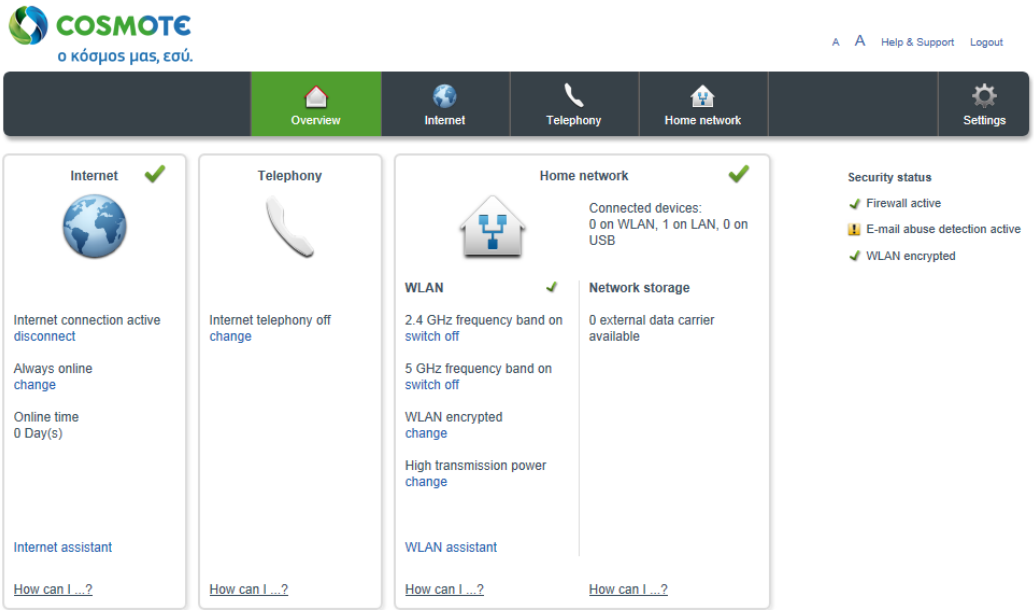
Configuration with the Assistant

After entering Speedport configuration program you have the option to use a step-by-step assistant to guide you through the basic configuration.

Suggestion: If you want to execute once more the assistant later, click on **Internet Assistant** or **WLAN assistant** on the Overview page.

Notice: Always have the documents, which you have received from your provider i.e. OTE. You need your access data to establish a connection to the internet and to carry out settings for internet telephony.

Figure 3-8 Assistants page

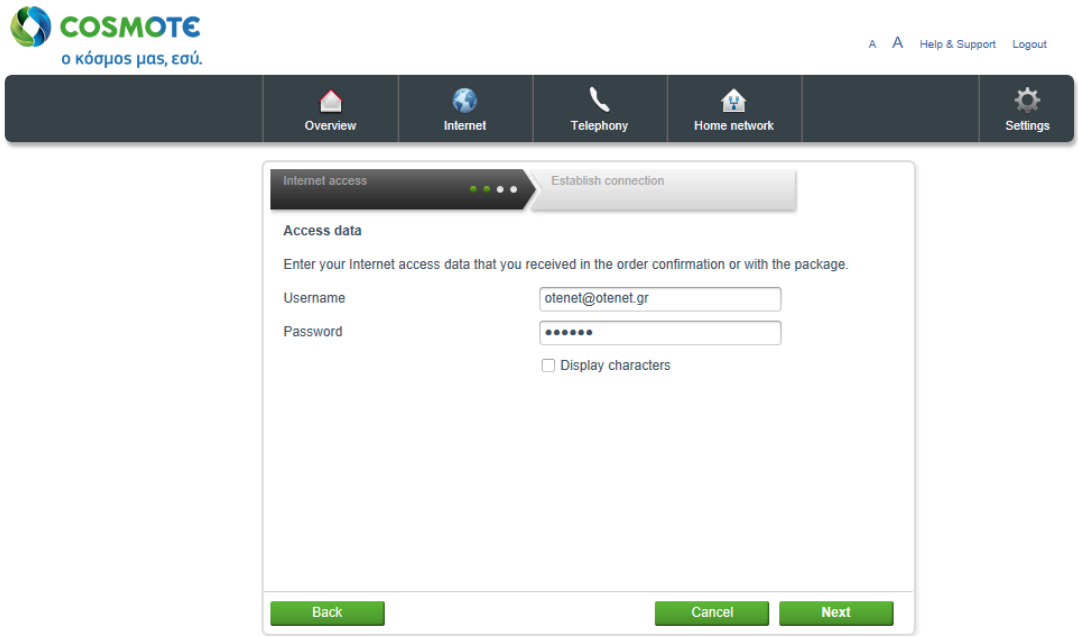


How to establish an internet connection

Internet connection via the broadband access (Internet Assistant).

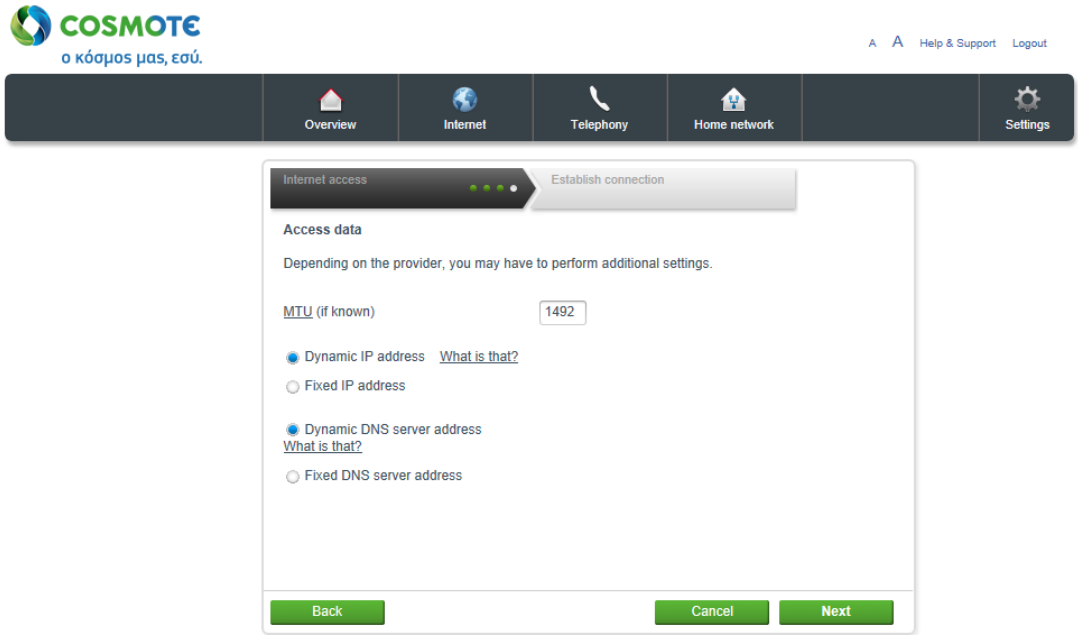
Enter your PPPoE username and password in the entry field. (The following example is intended for demonstration purposes only. Your personal access data will be available from OTE).

Figure 3-9 Internet Access



1. Enter the user name ptenet@otenet.gr in the entry field.
2. Enter your personal password in the entry field ●●●●●●●●● .
   You can make these signs visible, if you tick on 'Display Characters' option.

Figure 3-10 Access Data



3. Depending on the provider your have to key in additional settings for the access data.

· **MTU**

The MTU value (Maximum Transmission Unit) is preset. Just change it only if it needed by your internet provider. Default value is 1492

· **Dynamic IP address**

The choice of this option is the most common. If you choose this option Speedport will get its IP address automatically from the network.

· **Fixed IP address**

Choose this option, if your internet provider has supplied you with a Static IP address.

· **Obtain DNS server address automatically**

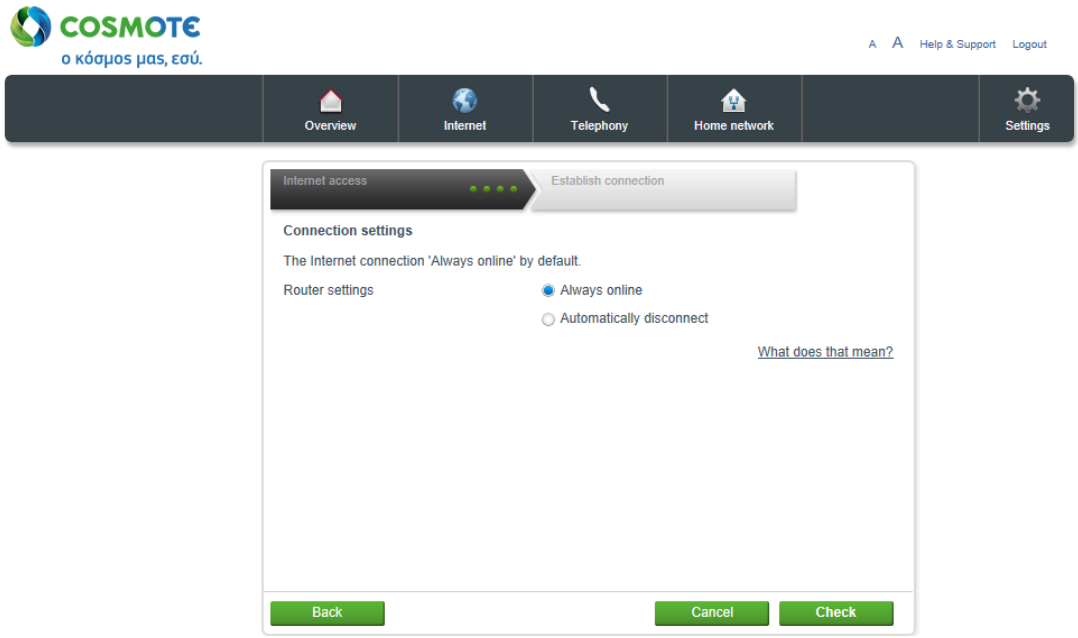
The choice of this option is the default. If you choose this option, your Speedport will get the assigned DNS server addresses automatically from the network.

· **Fixed DNS server address**

Choose this option, if you want to configure a static DNS server address from your internet provider.

4. After that click on the tab Next.

Figure 3-11 Connection Settings



5. Choose in accordance with your requirements between the options **Always online** and **Automatically disconnect**.

Notice: Choose the option **Always online**, if you don't use a time based internet rate.

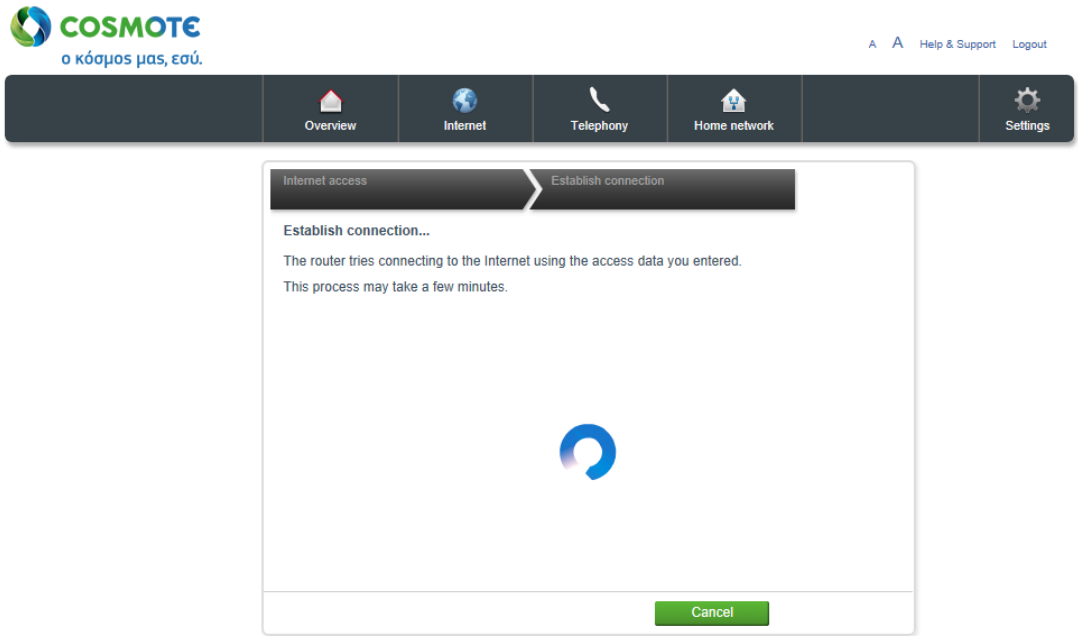
If you use time-based internet rate, this setting can cause additional costs.

Suggestion: Choose **Always Online**. If you select the option **Automatically disconnect** you can choose between different preset time periods after which, if there is no Internet traffic, the Internet connection is disconnected. The drop down menu contains:

.

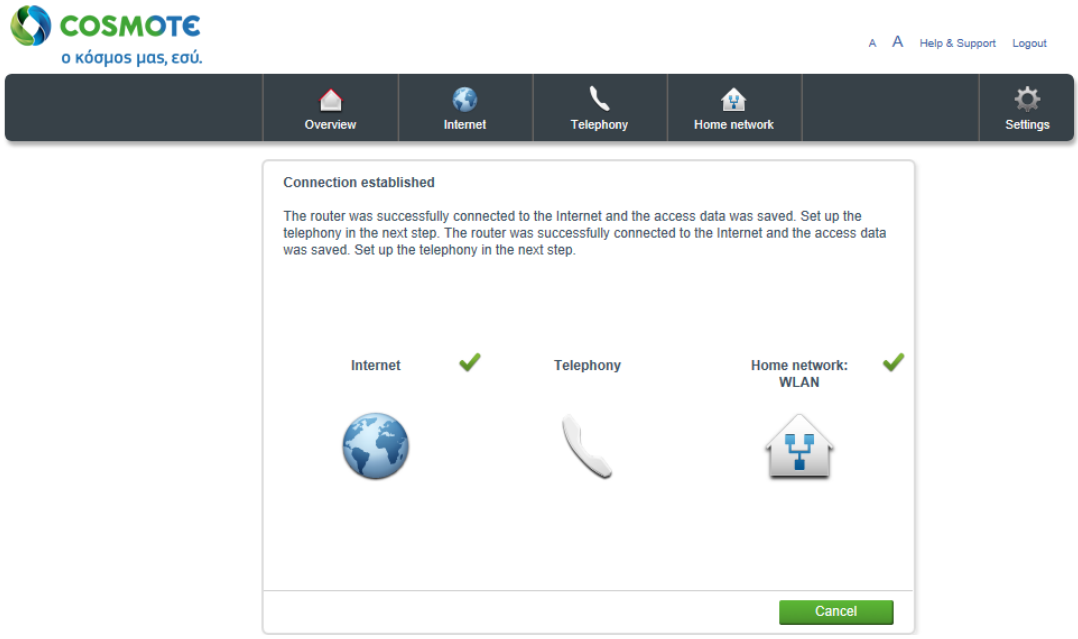
6. After that click on the tab Check .

Figure 3-12 WLAN Connecting



7. Your internet connection will now be tested with the settings you have keyed in. If the connection cannot be established you will get a message for possible errors and the respective suggestions for fixing the problem.

Figure 3-13 WLAN Connection Success



8. After a successful installation of the internet connection the assistant offers you the possibility, to carry on with the installation of the **Home network**.

Establish home network (WLAN).

With your Speedport you can establish a home network via WLAN (Wireless Local Area Network). For this home network all connections are built up wirelessly.

The wireless connection is carried out irrespective of the operation system. But for every network capable device, which you want to connect to your Speedport via WLAN you need a Wi-Fi compatible network capable card.

In modern computers, notebooks and other network capable devices, a WLAN adapter is already integrated. For more information of the integrated WLAN adapter in your device, please consult the documentation of the manufacturer.

The home network for your Wi-Fi network capable devices will be recognized via a distinct WLAN name (SSID or also network name). This distinct WLAN name will be sent by your Speedport.

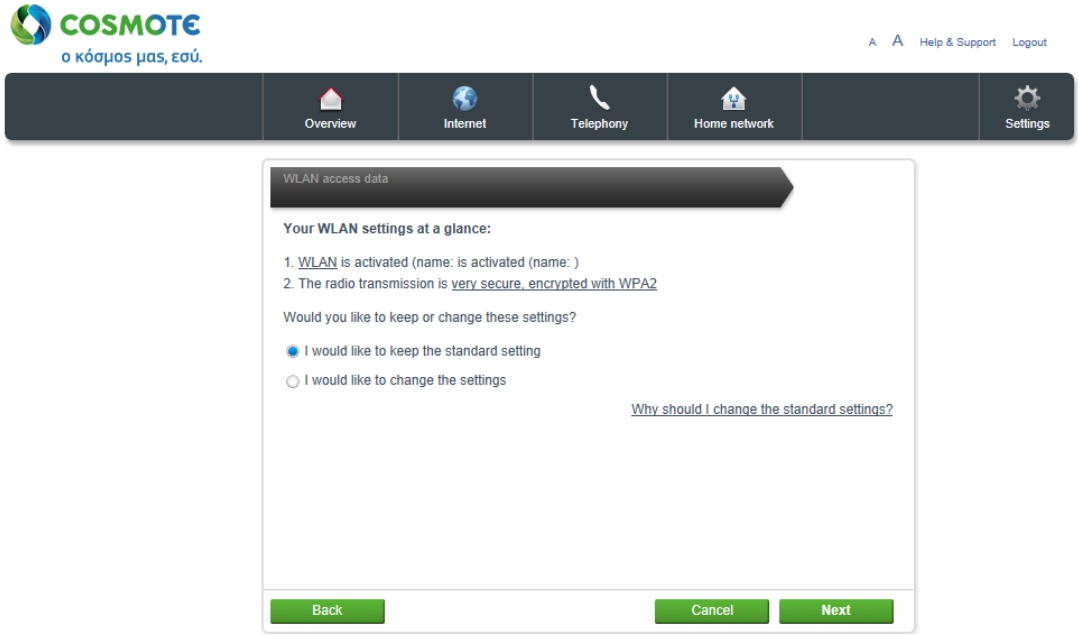
Before starting with the connection procedure, please check, if the network capable device, with which you want to establish the wireless connection, does support the WPA2 encryption. You can learn this from the respective instruction manual.

Suggestion: We suggest using WLAN network components, which support a secure WPA2 encryption.

Establish wireless home network (WLAN) with assistant.

After using the Internet assistant for the installation of **Internet** service you have the possibility to start the **Wireless assistant** (if you are in a different menu, press 'Overview' in the main bar).

Figure 3-14 WLAN Access (Wireless assistant)

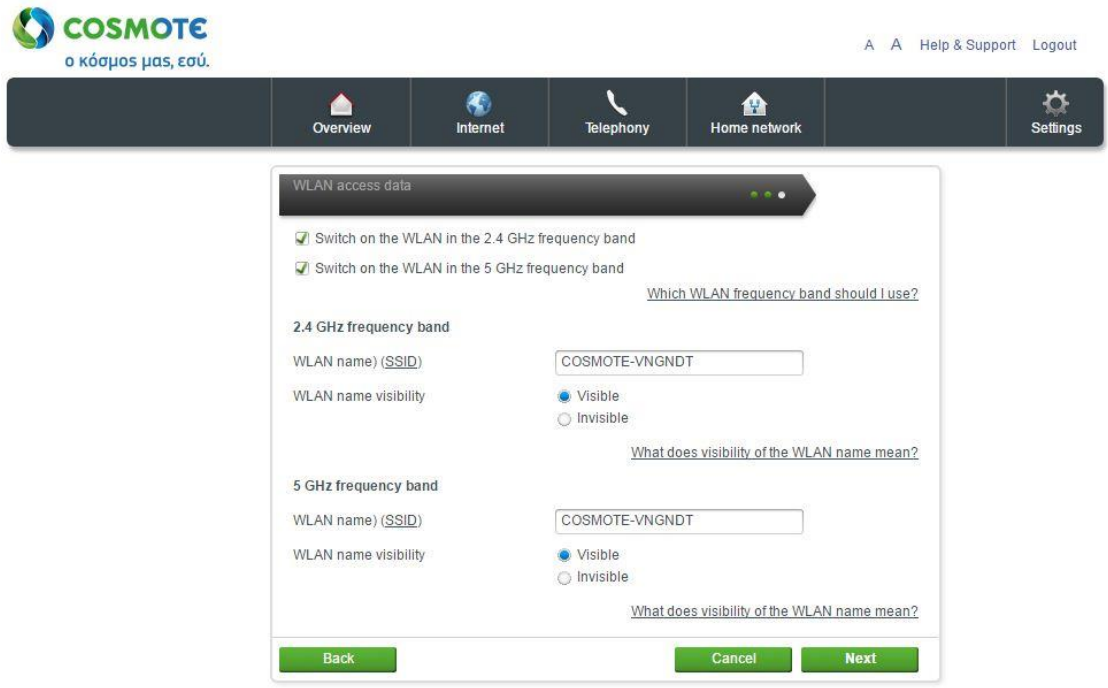


1. Click on the tab WLAN assistant to start the installation.
2. If you just have one Wi-Fi capable device attached or you do not want to carry out special settings, choose the option **I would like to keep the standard setting**. Or else use the function **I would like to change the settings**.

Suggestion: The standard settings should be changed, if your network capable device does not support the preset WPA2 encryption or if you prefer another WLAN name. You can also deactivate the WLAN function of your Speedport, if you do not need it anymore. For security reasons it is suggested to change the default SSID name and key of the device to the ones of your preference.

Notice: If you carry out the configuration assistant via WLAN, the connection will be cut after saving the changes. Then you have to reboot the connection to the WLAN with the new settings once more.

Figure 3-15 WLAN Access Setting



3. Now you can carry out the settings on your wireless home network (WLAN) to the used **frequency band** and to the applied **WLAN name (SSID)**.

Which frequency band should you use?

The standard setting uses both frequency bands (2.4 GHz and 5 GHz) simultaneously.

· The **2.4 GHz frequency band** is the most commonly used WLAN frequency band and will therefore be supported by all WLAN devices. This is the default setting.

· The **5 GHz frequency band** is momentarily not supported by all WLAN devices. If none of your devices support the 5 GHz frequency band, don't activate it.

Notice: If you want to change the WLAN frequency, remove/add the respective hooks.

Notice: If you remove both hooks at both WLAN frequency bands, the WLAN will be completely deactivated.

Which WLAN name (SSID) should be assigned?

You have the possibility to change the default WLAN name (and it is suggested). If you want to customize WLAN name to one of your own, please check that there is no overlapping with other wireless home network names.

· With the individually modified **WLAN name (SSID)** you can easily recognize your own wireless home network among other wireless home networks.

·EnteryourindividualWLANname(SSID)intheentryfield.

Notice: The WLAN name (SSID) can be up to 32 signs long and consist of signs, numbers or special signs. But please avoid personal info embedded in the name such as e-mail addresses, birthdays, names, telephone numbers or addresses.

Suggestion: If you assign different WLAN names (SSID), you can distinguish them better when installing Wi-Fi capable network devices.

What does the visibility of the WLAN name mean?

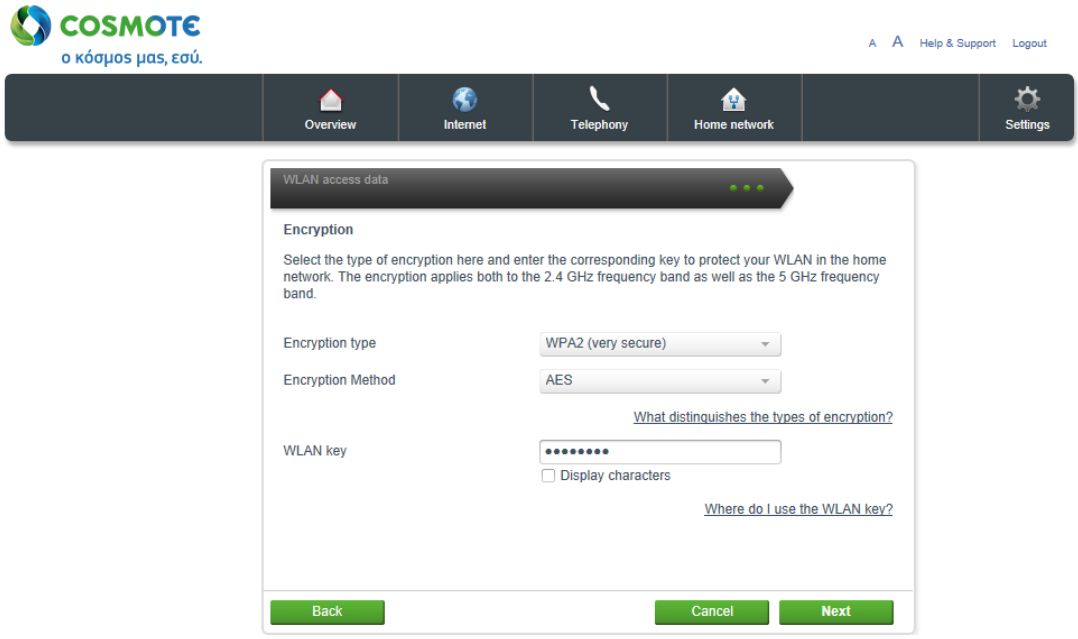
If you do not want your wireless home network (WLAN) to be seen by others you can deactivate the visibility of your network.

· The option **visible** makes it easier for your wireless home networks (WLAN) to be found and chosen by new network capable device for installation.

· The option **invisible** slightly increases the protection against unauthorized access, but does not replace at all an encryption of the wireless home network (WLAN). If you choose this option then you have to manually add the configured SSID name of Speedport to the Wi-Fi capable device.

4. If you have finished configuring the settings according to your requirements, click on the tab Next.

Figure 3-16 WLAN Encryption



5. Now you can carry on with the **encryption** settings of your wireless home network (WLAN).

Which encryption shall you use?

You have the possibility to change the preset encryption. This might be necessary if you want to build up a wireless home network with older network capable devices. The secure WPA2 encryption is the default setting.

Notice: The set encryption is valid for both frequency bands.

Suggestion: The supported encryption of your WLAN network capable devices can be learned form their respective instruction manuals.

Which WLAN key you should choose?

If you want to change the WLAN key, pleaseenter your personal WLAN key in the entry field.

Choose a WLAN key consisting of at least eight and at most 63 signs. Do not insert empty spaces. The longer the WLAN key the more secure it is. But please avoid embedding personal information such as birthdays, names, telephone numbers and addresses.

Notice: Assign personal and secure password! Especially for the device password of your Speedport, the internet access password (PPPoE) and the WLAN key.

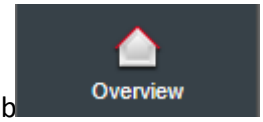
Suggestion: The WLAN key has to be inserted at every WLAN network capable device, which you want to connect with the Speedport through WLAN.

6. Click on the tab Next.

7. The configuration of your Wireless home network (WLAN) is now finished. Click on the tab End to close your assistant.

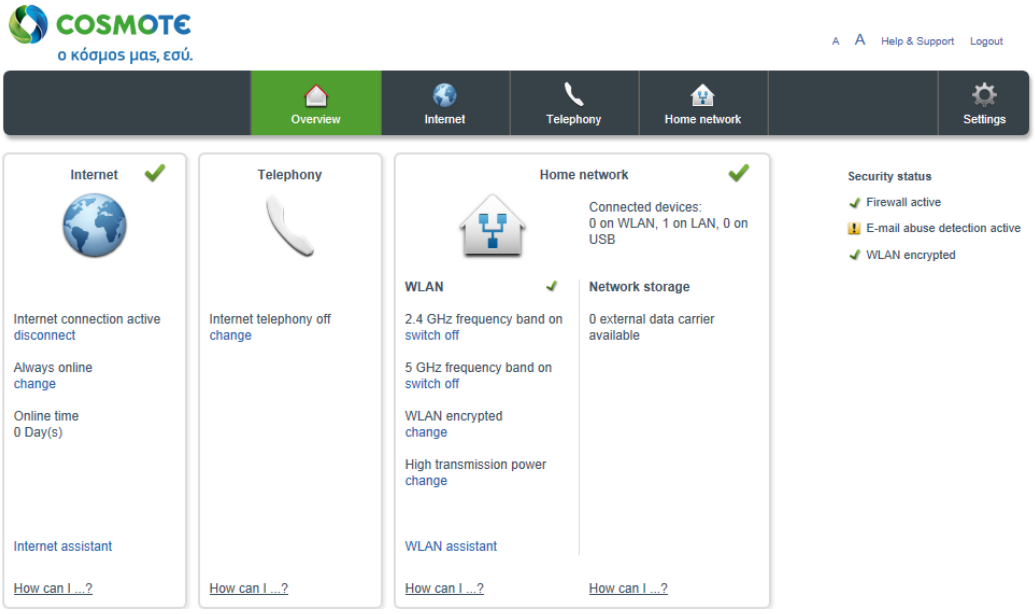
3.3 Overview

After connecting and configuration your Speedport, the device is available for the connected devices within the home network.

After finishing the step-by-step assistant your Speedport displays an overview of settings. You can also call the page by clicking the tab 

.

Figure 3-16 Overview



By clicking the single statements you can adapt the respective settings.

Click on the statements **Internet assistant** or **WLAN assistant**, if you want to execute the installation assistants once more.

Overview Internet

Figure 3-16 Internet assistant

· The first point shows, if the internet connection is **active** or **inactive**.

· The second point shows you the **status** of the internet connection.

· The third point displays the **online time**. This value show the duration since your Speedport has been connected to the internet without interruption.

· Click on the statement **Internet assistant**, if you want to execute the assistant for installation once more.

Suggestion: Click on the statement **How can I...?**, for using the help function integrated in the Speedport.

Overview Telephony

Figure 3-16 Telephony assistant

· Click at the first point on **change**, if you want to adapt the settings for the internet telephony.

Suggestion: Click on the statement **How can I...?**, for using the help function integrated in the Speedport.

Overview home network

Figure 3-16 WLAN assistant

The overview home network is divided into two areas. The left side shows an overview for the area **WLAN**, the right side shows an overview for the area **Network storage**.

WLAN area.

· Click at the first point on **switch off** or **switch on**, for switching the 2.4-GHz frequency band in your home network (WLAN) on or off.

· Click at the second point on **switch off** or **switch on**, for switching the 5-GHz frequency band in your home network (WLAN) on or off.

· Click at the third point on **change**, if you want to change the type of encryption for your home network (WLAN).

· Click at the fourth point on **change**, if you want to change the settings for the transmission performance of your Speedport.

· Click on the statement **WLAN assistant**, if you want to execute the assistant for installation of the home network (WLAN) once more.

Area Network storage.

· The first point shows how many external data storages (USB sticks, hard drives) you have attached to the USB ports of your Speedport.

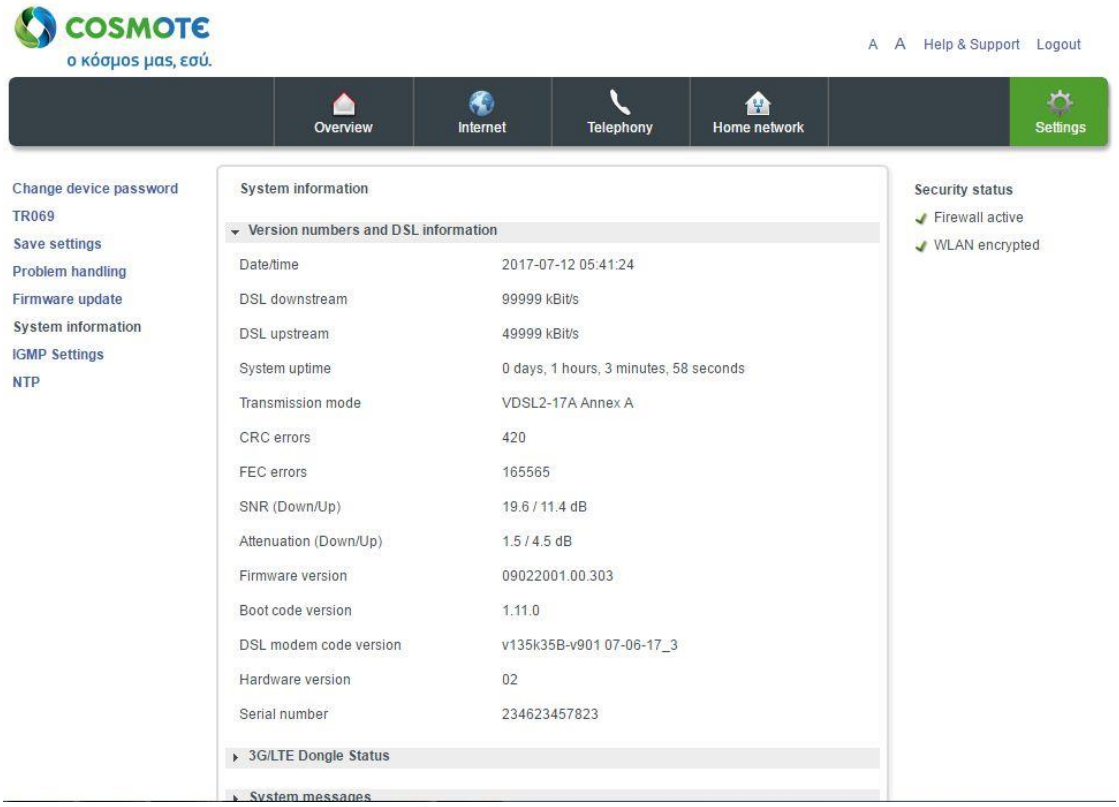
Suggestion: Click on the statement **How can I...?**, for using the help function integrated in the Speedport.

Chapter 4 Status

4.1 System Information

4.1.1 Version numbers and DSL information

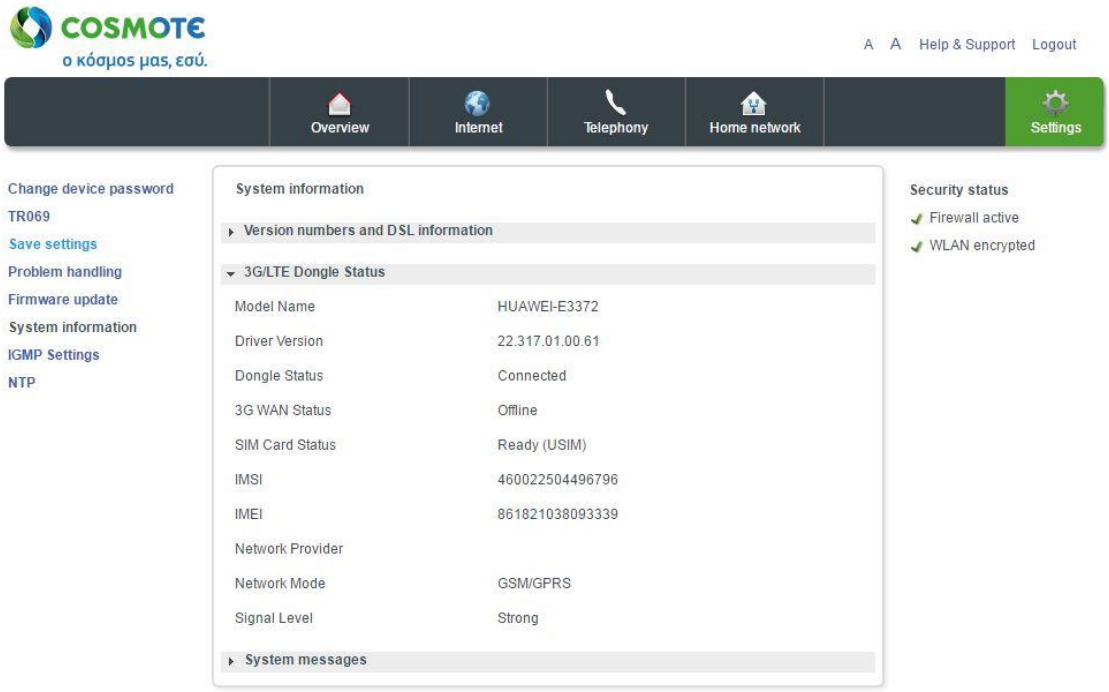
Figure 4-1 System Information



1. Click in the left column on the statement **System information**.
2. Click on the statement **Version numbers and DSL information**, to get the version number and the information displayed above. Similar information is displayed, before you login to the device, by clicking on **Status Information**. In the current menu, you can check the DSL downstream/upstream rates, the firmware version, system uptime and the transmission mode that the device is using (for example VDSL2 or ADSL2+).

4.1.2 3G Dongle Status

Figure 4-2 3D dongle Status

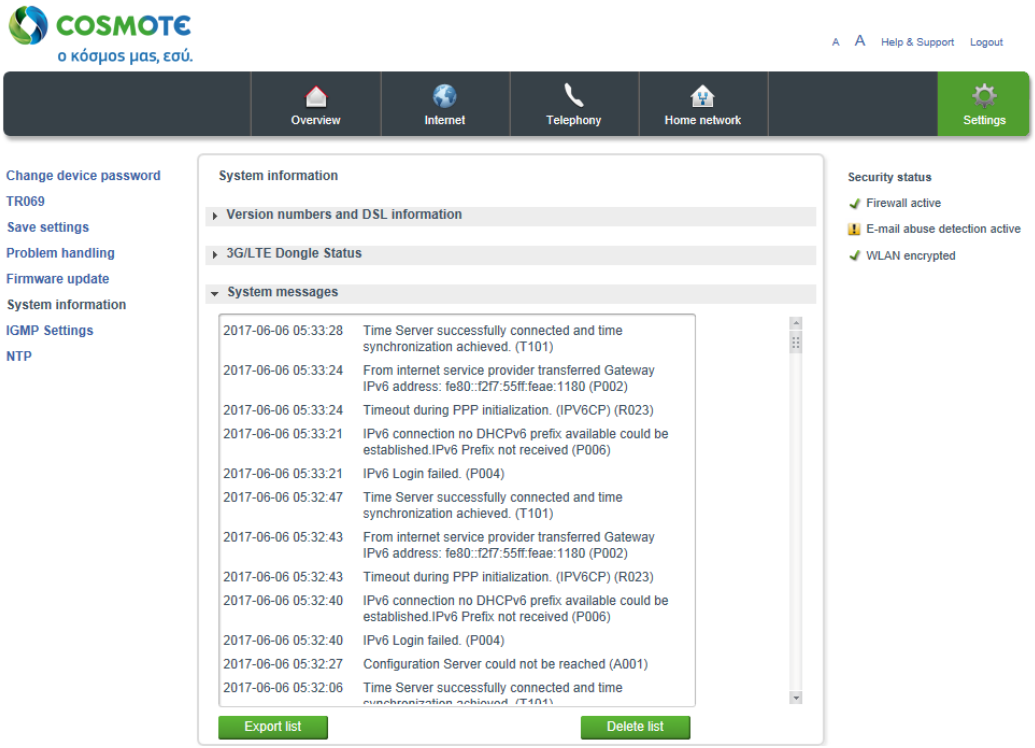


1. Click in the left column on the statement **System information**.
2. Click on the statement **3G/LTE Dongle Status**, to get the version number and the information of dongle displayed. Note that not all 3G/LTE dongles are supported.

4.1.3 System messages

In this menu, messages reported by the device are shown which can be really helpful in case of a problem.

Figure 4-33 System Message



1. Click in the left column on **System information**.
2. Click on the statement **System messages**.

3. Click on the tab 

, to export the list of system messages. That might be necessary, if you want to save an error condition.

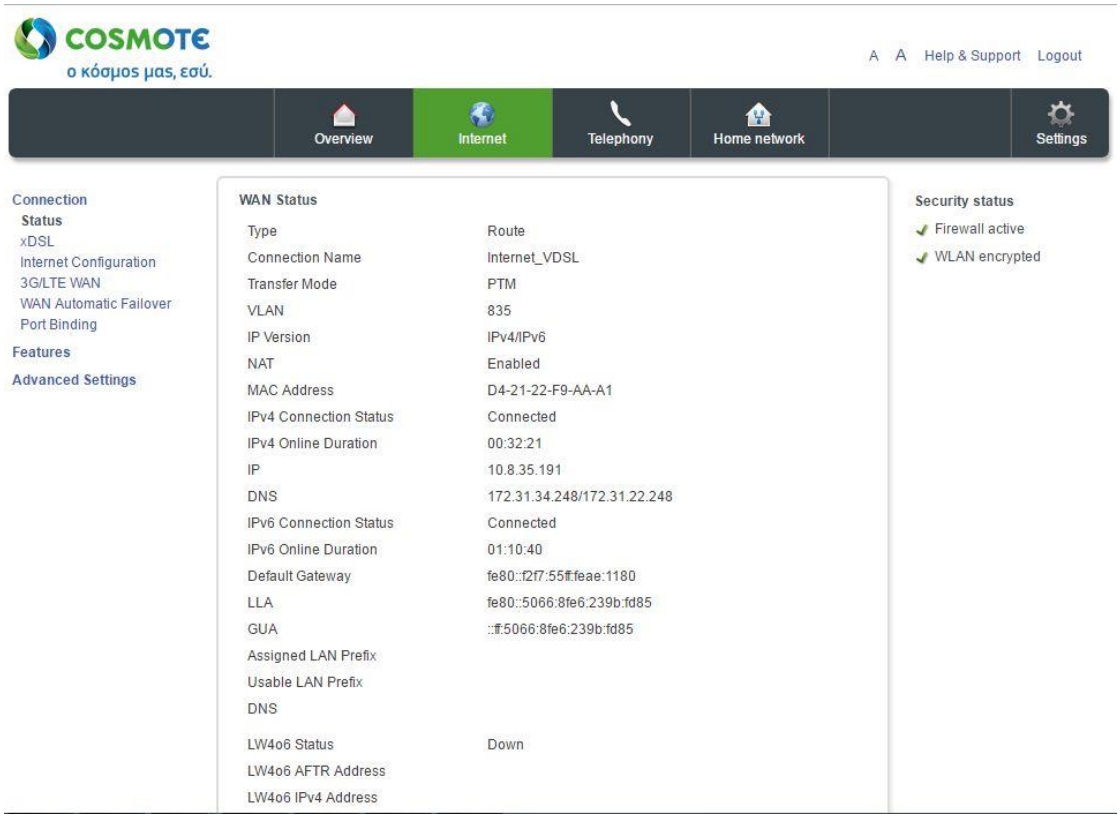
4. Click on the tab 

, to have the list of system messages erased.

4.2 WAN Status

In this menu you can see important information about the active services provided by the device such as WAN IPs acquired, transmission mode that is active, VLAN values for VDSL2 mode, VPI/VCI values (for ADSL modes) and PPPoE active duration time.

Figure 4-4 WAN Status

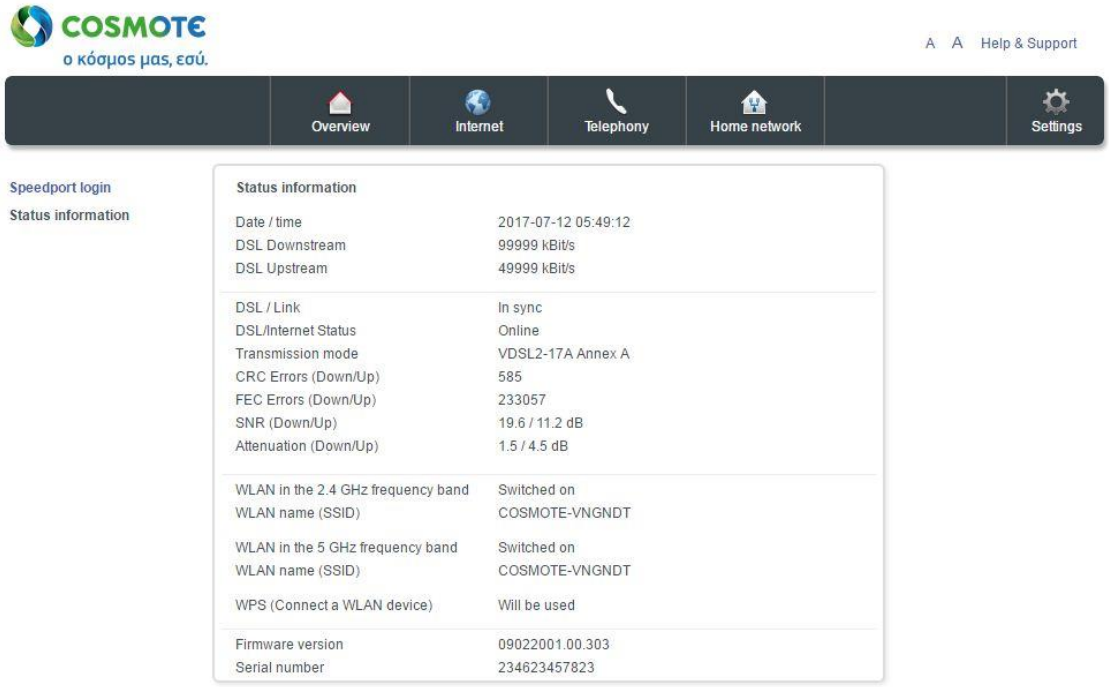


1. Click on the entry **Status**.

Notice: In our example we show you a broadband connection, which provides address information for IPv4 and no DSL cable is connected. These data may vary, depending on which address information your broadband connection provides. When you connect the DSL cable, depending on the xDSL mode negotiated, only the associated services to the specific transmission mode are displayed.

Notice: Basic information on the Internet connection is given before you log in the device as you can see below. Basic information such as type of transmission mode, downstream and upstream rates, SNR values of the connection, WLAN information and firmware version.

Figure 4-5 Status Information



Chapter 5 Internet Menu

5.1Connection option

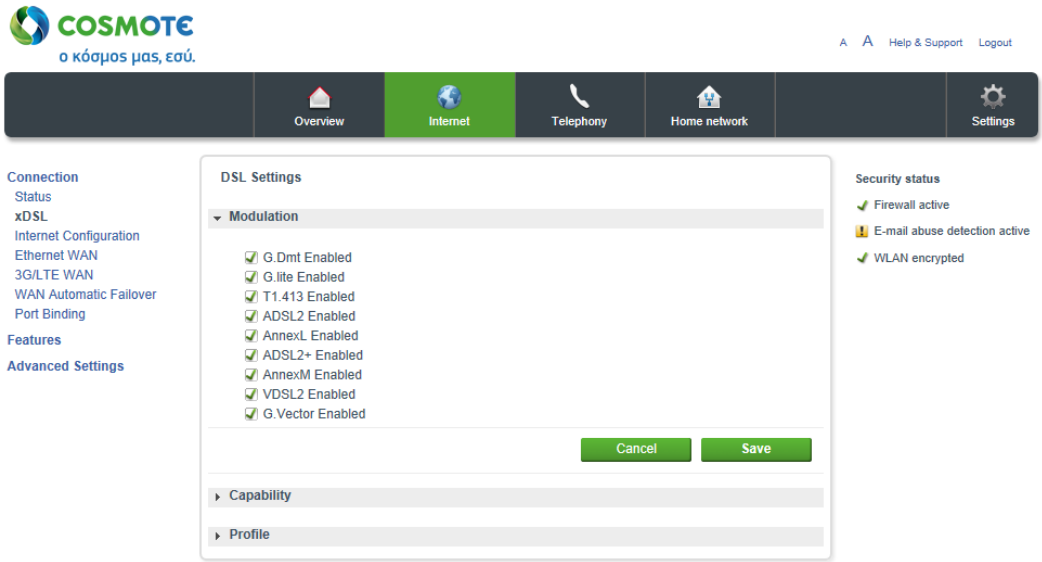
5.1.1Status

Described in chapter 4.2.

5.1.2xDSL Modulation

In this menu you can see the transmission modes that Speedport has been configured for.

Figure 5-1 xDSL Modulation



1. Click on **xDSL**.
2. Click on **Modulation**.

Table 5-1 Parameters for Modulation

Parameter	Description
G.DMT	It is an ITU standard for ADSL using discrete multitone modulation.
G.Lite	It is an ITU standard for ADSL using discrete multitone modulation.
T1.413	It is a technical standard that defines the requirements for the single asymmetric digital subscriber line (ADSL) for the interface between the telecommunications network and the customer installation in terms of their interaction and electrical characteristics.
ADSL2	It is a standard for delivering internet connectivity through telephone connections. It is designed to work approximately twice as quickly as ADSL.
Annex L	It is an optional specification in the ITU-T ADSL2 recommendation.
ADSL2+	It is an International Telecommunication Union standard for asymmetric digital subscriber line (ADSL) broadband Internet access.
Annex M	It is an optional specification in ITU-T recommendations G.992.3 (ADSL2) and G.992.5 (ADSL2+), also referred to as ADSL2 M and ADSL2+ M.
VDSL2	It is an access technology that exploits the existing infrastructure of copper wires that were originally deployed for traditional telephone service as a way of delivering very high speed internet access.
Bitswap	It is the essential adaptive hand-shaking mechanism used by DMT modems to adapt to line changes.

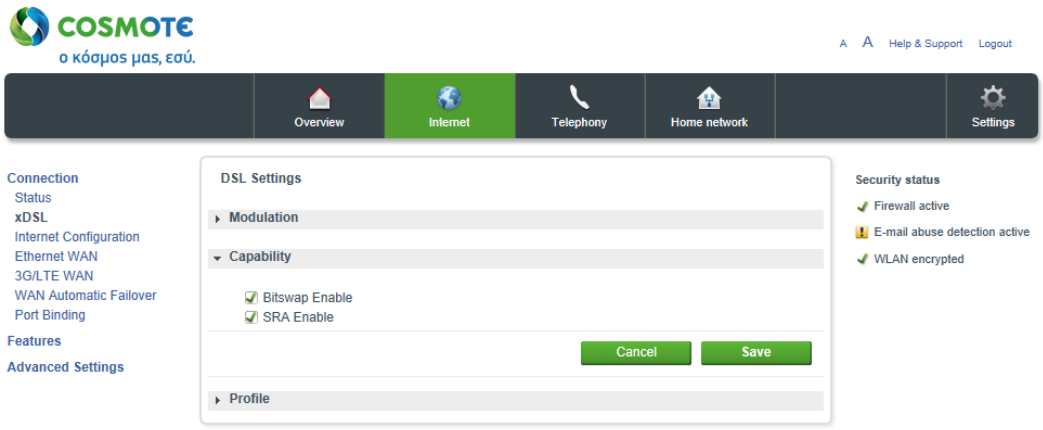
3. You can change these settings by removing the **hooks** from the respective modulations based on your needs.

4. When you have modified your settings, confirm the changes by clicking the tab Save. If you do not want to save your changes click on the tab Cancel.

Capability

Bitswapping allows the xDSL line not to loose sync if the SNR in any of the subchannels dropped too low and became unstable. It is an adaptive hand-shaking mechanism used by Home Gateways to adapt to line changes.

Figure 5-2 xDSL Capability



1. Click on **xDSL**.
2. Click on **Capability**.
3. Set the hook at **Bitswap Enable** (default)
4. When you have modified your settings, confirm the changes by clicking the tab

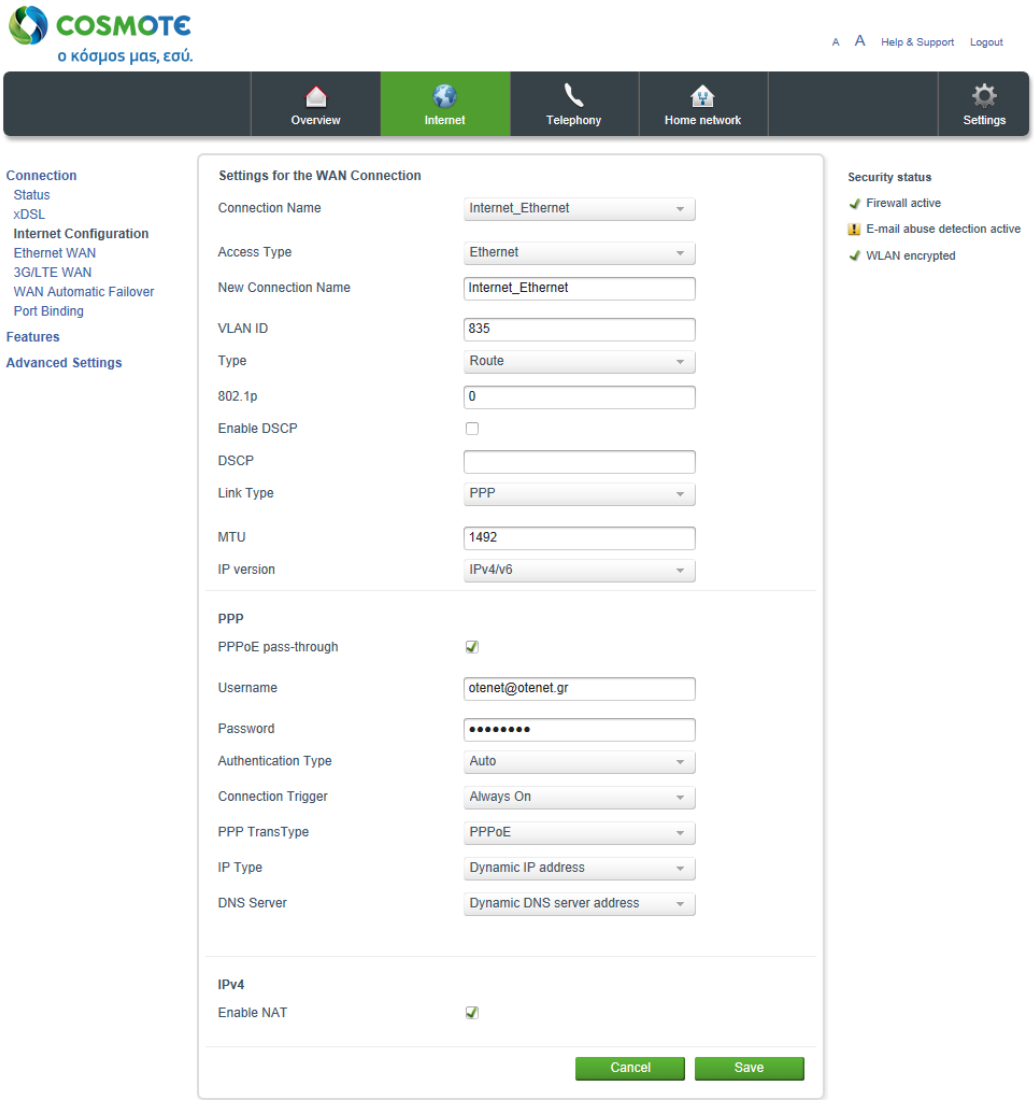
. If you do not want to save your changes click on the tab

.

5.1.3Intenet Connection

The device tries, at first, to synchronize in VDSL2 mode and then in ADSL2+ mode.
If you are in VDSL2, through Internet Configuration menu, you can customize the PTM configuration or you can add a PTM service.
If you want to customize any other mode than PTM (e.g. ATM) you must unplug the DSL cable from the DSL interface.

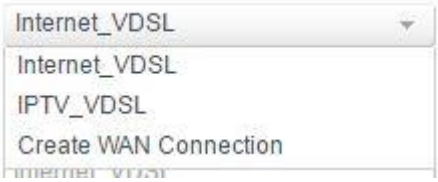
Figure 5-3 VDSL2 Internet Configuration



1. Click on **Internet Configuration**.
2. Configure the following parameters:

Table 5-2 Parameters for VDSL2 WAN connection

Parameter	Description
Connection Name	The connection name is generated automatically.
Access Type	Choose either ATM or PTM. PTM if you want to configure VDSL2 or ATM (intended for ADSL2+).
New Connection Name	Enter the name for new connection.
VLAN ID	If PTM is chosen, define the VLAN that is used for the specific service. For Fast Internet service the default VLAN id is 835 and for the OTE TV service the default VLAN id is 836
Type	Choose the type for connection. For Fast Internet access the default type is Routed, for OTE TV is bridged.
Link Type	Choose either PPP (default) or IP.
MTU	Define the maximum transfer unit. Default is 1492.
IP Version	The IP version includes: • IPv4 (default) • IPv6 • IPv4/v6
Username/Password	Enter the user name and password provided by the ISP.
Authentication Type	There are three types: Auto, PAP, and CHAP.
Connection Trigger	There are three connection trigger modes: • Always On: When the device is started or gets offline, the system triggers PPPoE dialing automatically (default) • On Demand: The system triggers PPPoE dialing on demand. • Manual: The system triggers PPPoE dialing manually.
PPP Transtype	PPPoE available only.
Enable NAT	If enabled, NAT can be used to transfer the private network address to the public network address of the WAN port. If this option is not enabled you will experience problems browsing to the Internet.

3. Choose your connection name from the list 

.

4. Choose your access type for WAN connection from the list

5. Enter your connection name in the entry field 

.

6. Input “VLAN”. Default values are 835 for PPPoE (Fast Internet access) and 836 for OTE TV service.

7. Set the hook at the **PPPoE pass-through**. When this is enabled, the LAN/Wi-Fi devices can initiate PPPoE sessions.

8. Change “Username” and “Password” to an available account.

9. When you have finished configuring your settings, confirm the changes by clicking the tab 

. If you do not want to save your changes click on the tab 

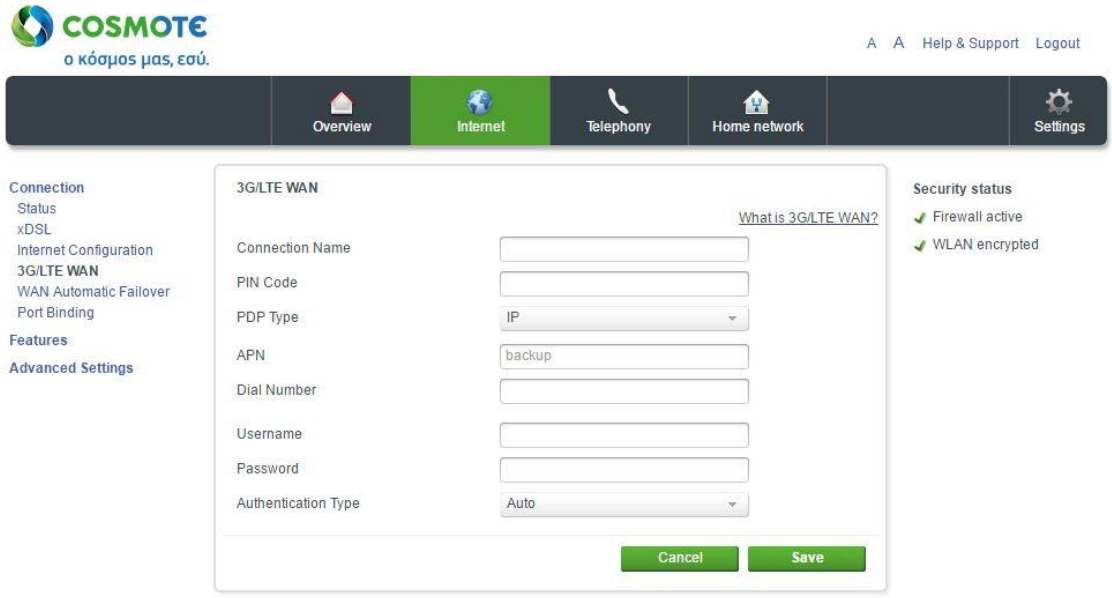
.

Notice: In our example we presented a VDSL2 broadband connection. In case of an ADSL2+ connection, instead of VLAN value you have to configure VPI/VCI values. By default the VPI/VCI values associated to the Fast Internet service is 8/35. For the OTE TV service the default bridged values are 8/36.

5.1.4 3G/LTE WAN

Configure 3G backup in case that the xDSL is not available.

Figure 5-5 3G/LTE WAN



1. Click on **3G/LTE WAN**.
2. Set the hook at the **Enable 3G/LTE WAN** in **WAN Automatic Failover**.
3. Enter your connection name in the entry field .
4. Enter pin code in the entry field .
5. Enter APN in the entry field internet .
6. Enter dial number in the entry field *99# .
7. Enter MTU port in the entry field 1492 .

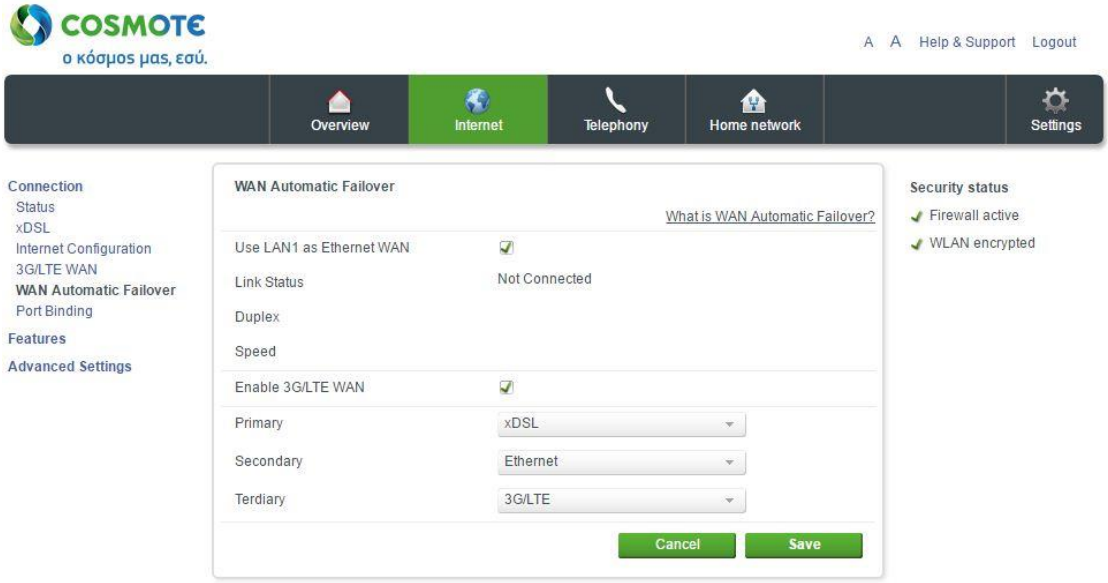
8. When you have adapted your settings, confirm the changes by clicking the tab

Save . If you do not want to save your changes click on the tab

Cancel .

5.1.5 WAN Automatic Failover

Figure 5-4 WAN Automatic Failover



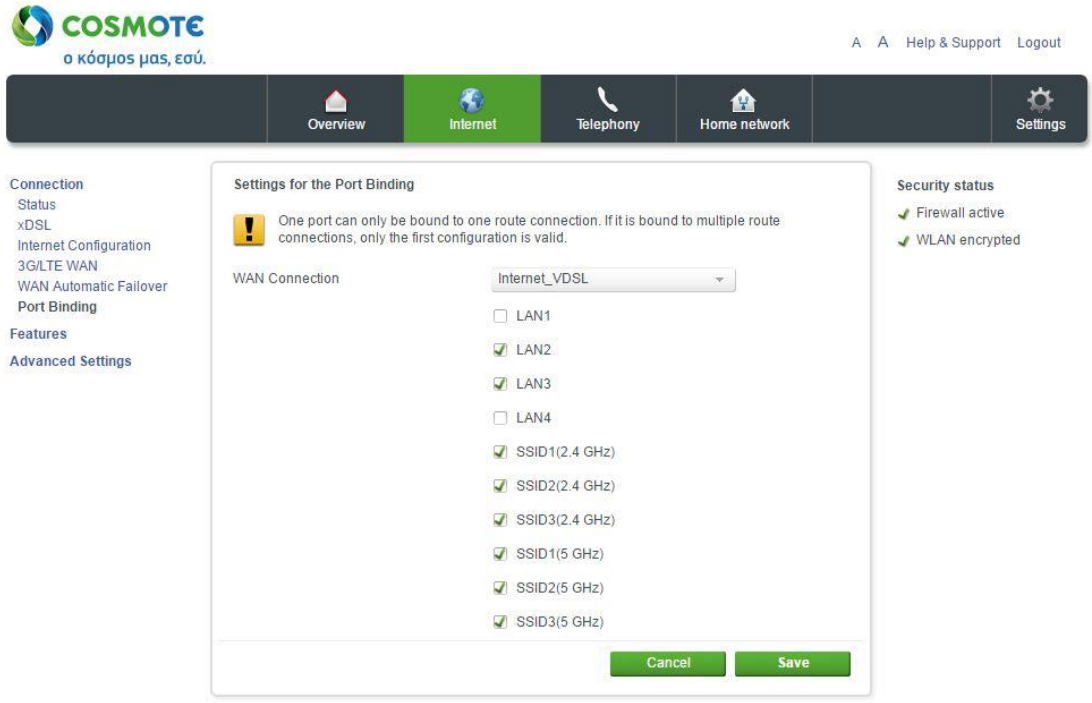
1. Click on **WAN Automatic Failover**
2. Set the hook at the **Use LAN1 as Ethernet WAN**to enable Ethernet WAN.
3. Set the hook at the **Enable 3G/LTE WAN** to enable 3G/LTE WAN
4. Select priority of each WAN connection from the lists.
5. When you have adapted your settings, confirm the changes by clicking the tab

Save .

5.1.6 Port Binding

Bind a service with a LAN port and SSIDs.

Figure 5-6 Port Binding



1. Click on **Port Binding**.
2. Choose your WAN connection from the list
3. Set the **hooks** at the options based on your needs.

Suggestion: One port can only be bound to one route connection. If it is bound to multiple route connections, only the first configuration is valid. By default, LAN4 is bounded to the OTETV service. By default, all ports except LAN4 are bound to the Fast Internet service and LAN4 to OTE TV service. If you want to assign all ports for Internet access then you just have to modify the port bindings on this menu.

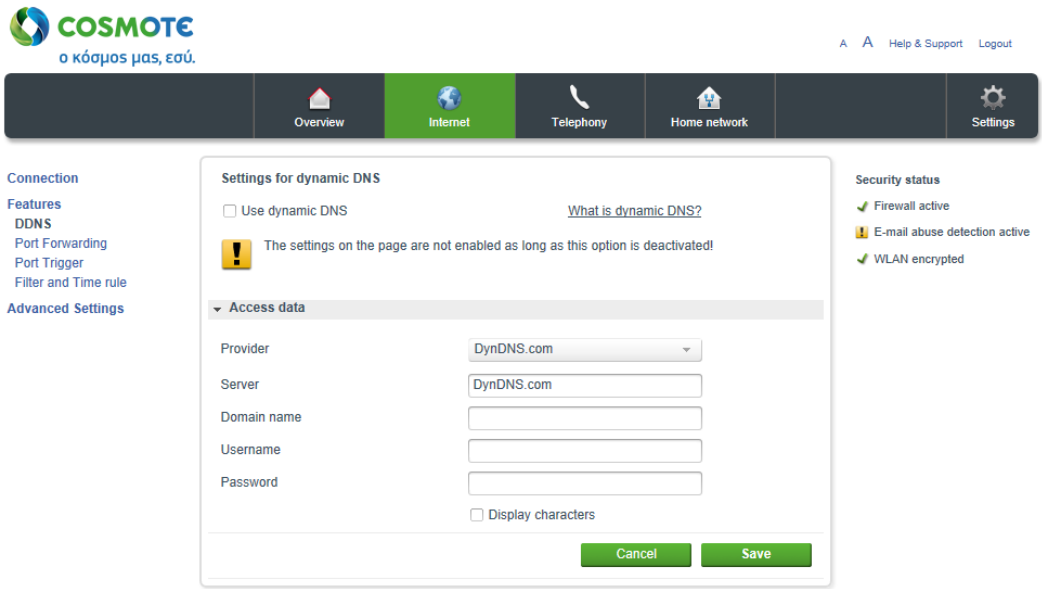
5.2 Features

5.2.DDNS

Via a dynamic DNS (Dynamic Domain Name System) you can assign an individual fixed domain to your Speedport on the internet, even if it does not have a fixed IP address.

The fixed (static) name of the domain will be dynamically forwarded to the current IP address. Like this your home network is permanently reachable from outside, for example for the maintenance of an own web server. For the use of dynamic DNS you need an account (user name) with a provider for dynamic DNS, a password and a static domain name.

Figure 5-7 DDNS



1. Click on **DDNS**.
2. Configure the following parameters:

Table 5-2 DDNS Parameters

Parameter	Description
Use Dynamic DNS	Select the check box to enable the DDNS function.
Provider	DDNS service provider.
Server	Server address.
Domain Name	Domain name corresponding to the user.
User Name	DDNS server user name.
Password	DDNS server password.

3. Click on **Access data**.
4. Set the hook at **Use dynamic DNS**.
5. Choose your provider for dynamic DNS from the list 

.
6. Enter your domain name in the entry field 

.
7. Enter your user name in the entry field 

.
8. Enter your personal password in the entry field 

.
9. When you have adapted your settings, confirm the changes by clicking the tab 

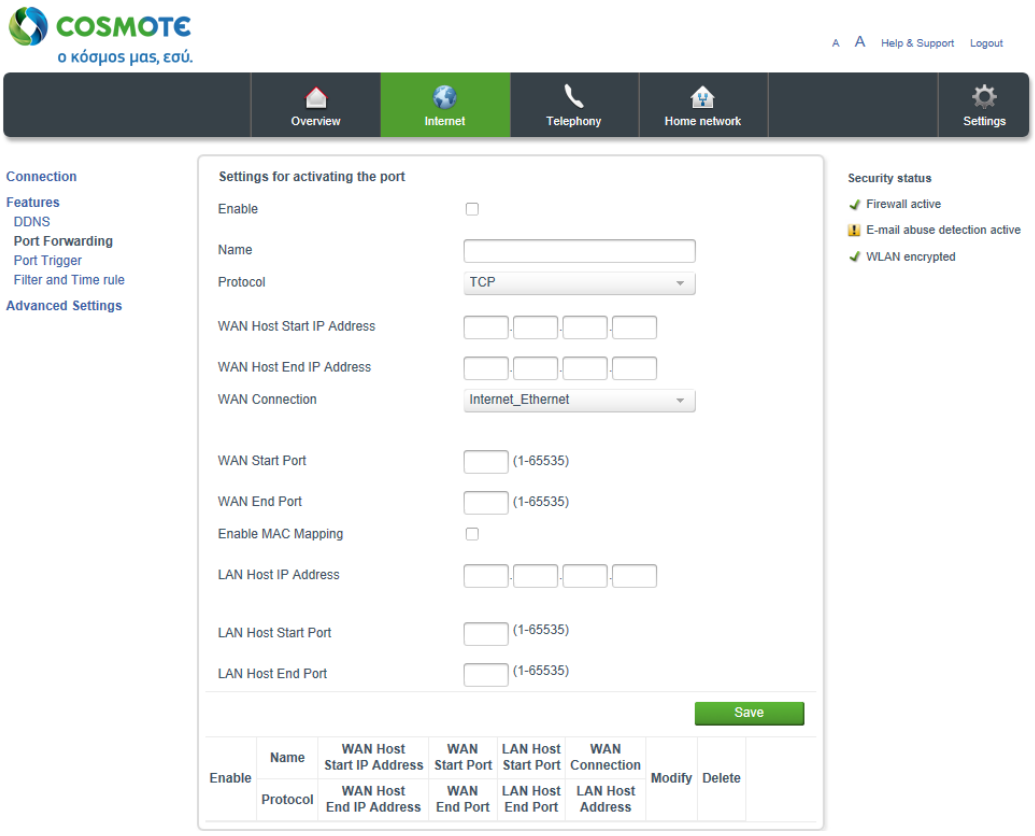
. If you do not want to save your changes click on the tab 

.

5.2.2Port Forwarding

With Port forwarding, the incoming data packages at one distinct port on your Speeport will not be forwarded to the same port, but to another port of a networkable device within your home network.

Figure 5-8 Port Forwarding



1. Click on **Port Forwarding**.
2. Configure the following parameters:

Table 5-3 Port Forwarding Parameters

Parameter	Description
Enable	Select the check box to enable port forwarding function.
Name	Virtual host name. It cannot be null.
Protocol	Protocol of the permitted packet. Default: TCP
WAN Host Start/End IP Address	IP address segment of the WAN-side host
WAN Connection	Select the WAN connection from this list.
WAN Start/End Port	Port number range of the WAN-side host (which port/s you want to forward)
Enable MAC Mapping	Select the check box to enable the MAC mapping function.
LAN Host IP Address	IP address of the LAN-side host
LAN Host Start/End Port	Port number range of the LAN-side host (put the same ports as the ones in the WAN side if you want to port forward to the same ports of the LAN host).

3. Set the hook at **Enable**.

4. Enter the name in the entry field 

.

5. Choose your protocol for port forwarding from the list.

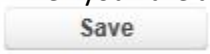
6. Enter the start/end IP address for WAN host in the entry field 
.

7. Choose your WAN connection from the list.

8. Enter the start/end port for WAN in the entry field 
. For example, put 80/80 if you want to administer an IP LAN camera

9. Choose your LAN connection from the list.

10. Enter the start/end port for LAN host in the entry field 
. For example, put 80/8 if you want to administer an IP LAN camera.

11. When you have adapted your settings, confirm the changes by clicking the tab 

. If you do not want to save your changes click on the tab 

.

5.2.3Port Trigger

Dynamic port activation.

With a dynamic port activation you can preset, which ports of an application (i.e. Filesharing-Programm) can be used for data exchange.

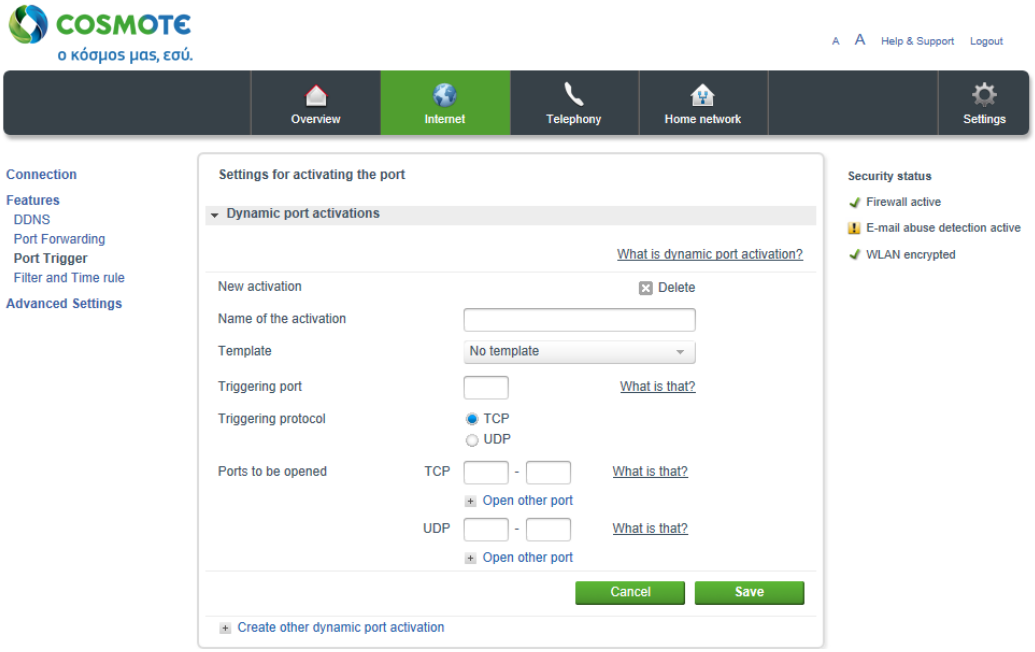
The dynamic port activation functions similarly to port forwarding. But you do not yet define the rules, to which networkable device incoming data packages for a certain port are forwarded.

Instead you define a port for outgoing data packages, which serves as trigger for the forwarding to a (mostly different) port.

As soon as an outgoing data package passes the Speedport on the before preset triggering port (trigger), then usually the rule for defined port forwarding will get active. For that incoming data packages will be forwarded to the networkable devices in the home network, from which the outgoing data package originates.

Notice: Please note that the data traffic via cleared ports can't be controlled by the firewall of your Speedport. Please also use firewall software on the respective networkable device.

Figure 5-9 Port trigger



1. Click on **Port trigger**.
2. Configure the following parameters:

Table 5-4 Port Trigger Parameters

Parameter	Description
Name of the activation	Name of the port triggering item.
Template	Select the desired template from the list.
Triggering port	Protocol port that the device accesses, which cannot be null.
Triggering protocol	Connection type of the external router Default: TCP
Ports to be opened	Port range that triggers port mapping, that is, layer-4 port number of the packet Once port triggering is enable, the start port and end port services are enabled. This parameter cannot be null.

3. Click on **Dynamic port activations**.
4. Click **Create other dynamic port activation**.

5. Enter the name of the activation in the entry field 

.

6. Choose if you want to use a template from this choice 

.

7. If you do not want to use a template, enter the triggering port (trigger) in the entry field. As soon as someone from outside accesses the triggering port a defined TCP/UDP port area opens in your home network.

8. Choose the triggering protocol (**TCP** or **UDP**).

9. Click on **Open other port** for the protocols TCP or UDP to create a port.

10. Enter the ports to be opened in the entry fields.

11. When you have adapted your settings, confirm the changes by clicking the tab 

. If you do not want to save your changes click on the tab 

.

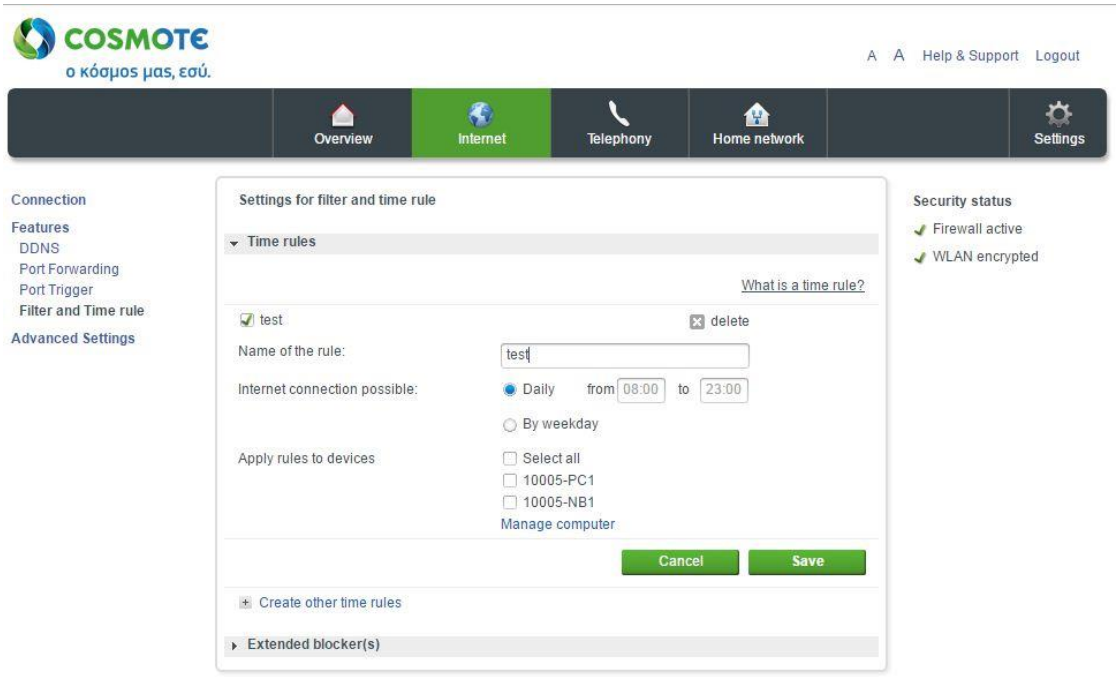
Suggestion: By clicking the statement **Create other dynamic port activation** you can create additional dynamic port activation. At most 32 rules can be applied.

5.2.4Filter and Time Rule

Time rules

In this submenu you can set time frames, in which just some chosen devices may use the internet. The function offers the possibility of a device individual time frame for internet use. Outside of this time frame these devices cannot build up a connection to the internet.

Figure 5-10a Time rules

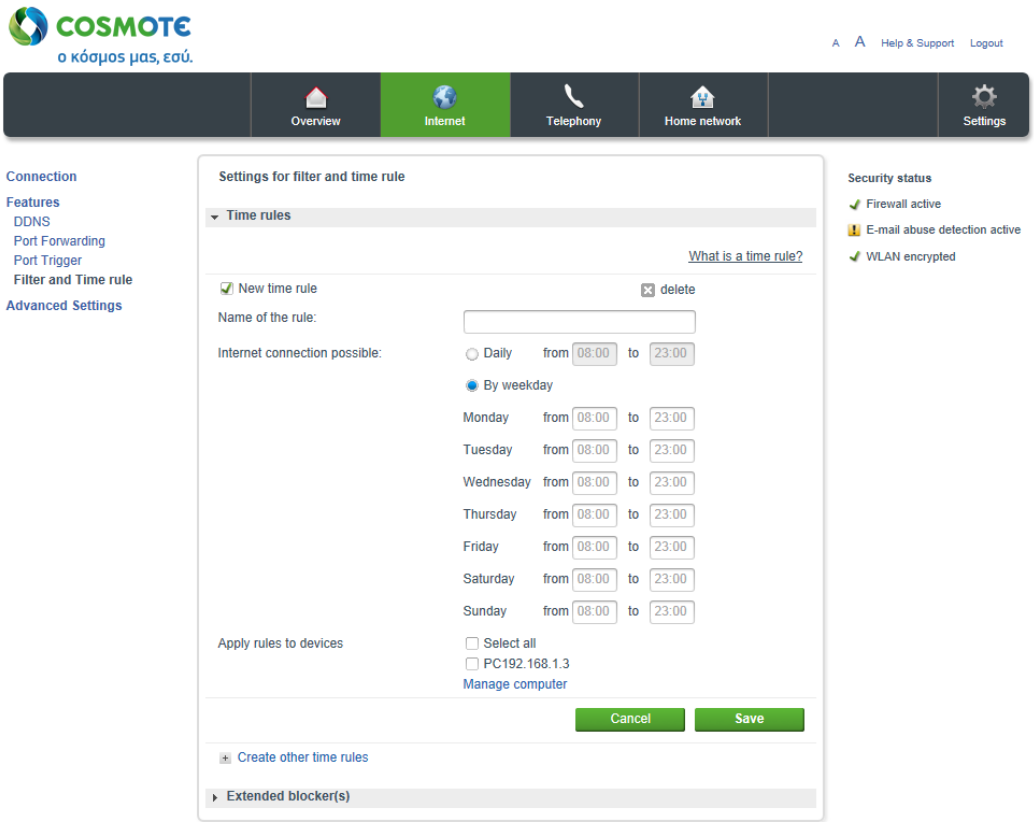


1. Click on **Filter and Time rule**.
2. Click on **Timer rules**.
3. Set the hook at the **new timer rule**.
4. Enter a name for the timer rule in the entry field 

.

5. Define the time frame (**Daily** or **By weekday**), for which the internet connection is allowed.
6. If the internet connection is allowed daily at the same time enter the time frame after the statement **daily**.

Figure 5-10b Time rules



7. If you want to set the internet connection for weekdays, you can enter a specific day time for every day. Enter the time frames after every respective **weekday**.

Notice: You can also set up day overlapping rules – in our example Saturday to Sunday.

8. Set the **hook** for devices on which the set timer rule shall be applied to.

Suggestion: If you click on the statement **Manage computer**, you will be forwarded to the submenu Overall of the devices in the home network in the menu home network. You can administer the connected devices there and add not yet registered devices. More information for computer administration is available in the chapter home network.

Notice: Changes, which have not been saved are getting lost after switching to another menu.

9. When you have adapted your settings, confirm the changes by clicking the tab Save. If you do not want to save your changes click on the tab Cancel.

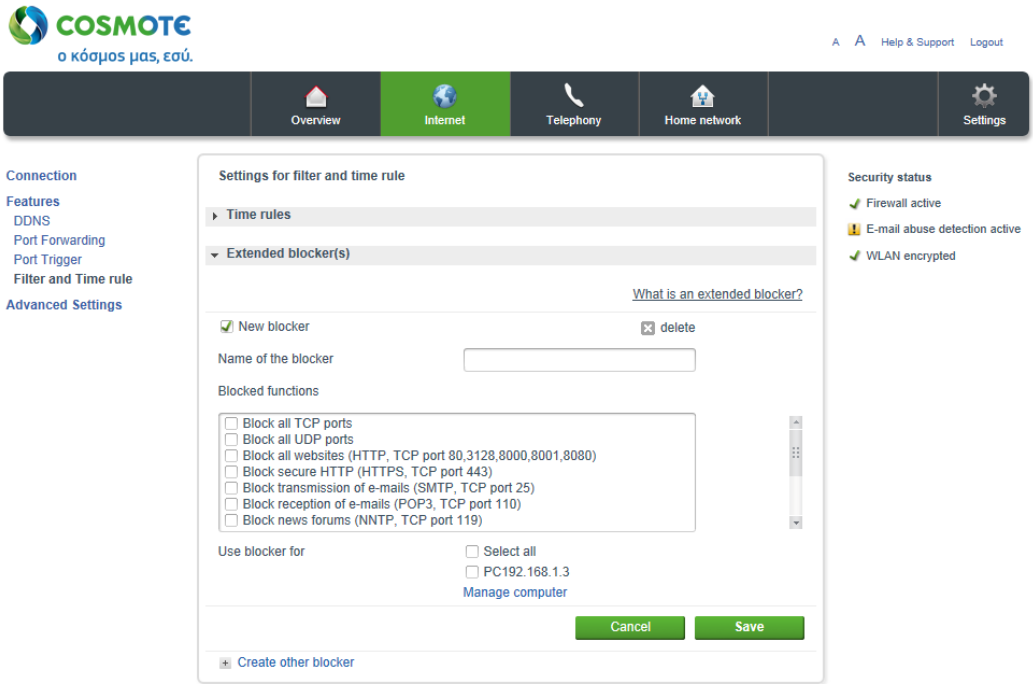
Suggestion: By clicking the statement **Set up new timer rule** you can set up new time rules.

Notice: When the timer rule is active the effected devices cannot build up a new connection to the internet.

Extended blocker(s)

With an extended block you can lock certain services and applications. Every port is usually assigned to a rule of a certain service or a certain application. If you want to block certain services or applications for one or all devices from the home network, you can set this up here.

Figure 5-11 Extended blocker(s)



1. Click on **Filter and Time rule**.

2. Click on the entry **Extended blocker(s)**.
3. Set the hook at **new blocker**.

4. Enter the name for a new blocker in the entry field 

.
5. Set the **hook** for the registered blocks, which you want to activate.
6. Set the **hook** for devices, on which the set locks shall be applied to.

Suggestion: If you click on the statement **Manage computer**, you will be forwarded to the submenu Overall of the devices in the home network in the menu home network. You can administer the connected devices there and add not yet registered devices. More information for computer administration is available in the chapter home network.

Notice: Changes, which have not been saved are getting lost after switching to another menu.

7. When you have adapted your settings, confirm the changes by clicking the tab 

. If you do not want to save your changes click on the tab 

.

Suggestion: By clicking the statement **Create other blocker** you can generate additional locks.

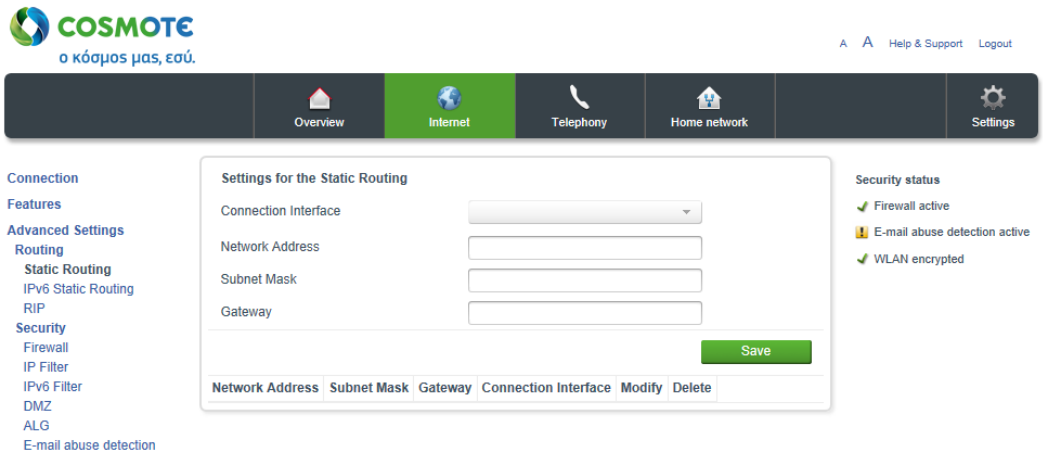
5.3 Advanced Settings

5.3.1Routing

5.3.1.1 Static Routing

This screen can be used to set IPv4 static routing parameters.

Figure 5-12 Static Routing



1. Click on **Static Routing**.
2. Configure the following parameters:

Table 5-5 Parameters for Static Routing

Parameter	Description
WAN Connection	Choose WAN connection for static routing.
Network Address	Destination network address.
Subnet Mask	Enter the subnet mask for the network address above.
Gateway	Enter the IP address of the gateway in order to reach the desired network/host.

3. Choose your WAN connection from the list.

4. Enter the network address in the entry field 

5. Enter the subnet mask in the entry field 

6. Enter the gateway in the entry field 

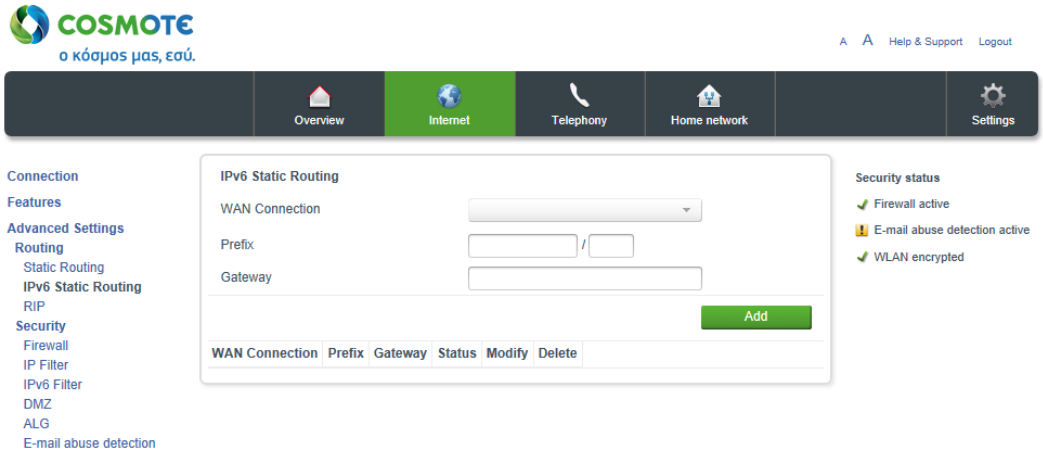
7. When you have modified your settings, confirm the changes by clicking the tab

.

5.3.1.2 IPv6 Static Routing

This screen can be used to configure the IPv6 static routing data from LAN side to WAN side.

Figure 5-13 IPv6 Static Routing



1. Click on **IPv6 Static Routing**.
2. Configure the following parameters:

Table 5-6 Parameters for IPv6 Static Routing

Parameter	Description
WAN Connection	Choose WAN connection for IPv6 static routing for egress.
Prefix	The prefix is consistent with the network segment of the IPv6 interface.
Gateway	The gateway is the next hop address in order to reach the desired network segment.

3. Choose your WAN connection from the list.

4. Enter the range for Prefix in the entry field 

5. Enter the gateway in the entry field 

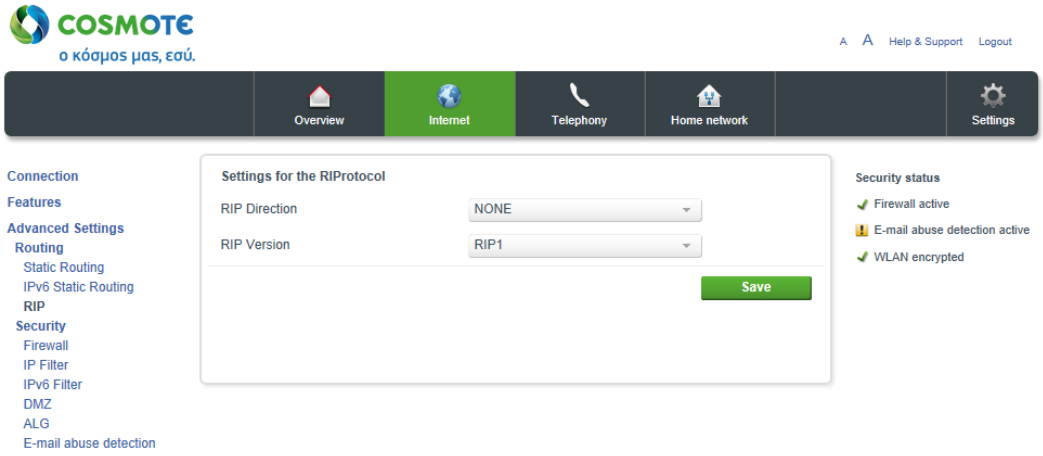
6. When you have modified your settings, confirm the changes by clicking the tab

.

5.3.1.3 RIP

This screen can be used to set RIP (Routing Information Protocol) function.

Figure 5-14 RIP



1. Click on **RIP**.
2. Choose direction for RIP from the list.
3. Choose version (**RIP1** or **RIP2**) for RIP from the list.
4. When you have modified your settings, confirm the changes by clicking the tab

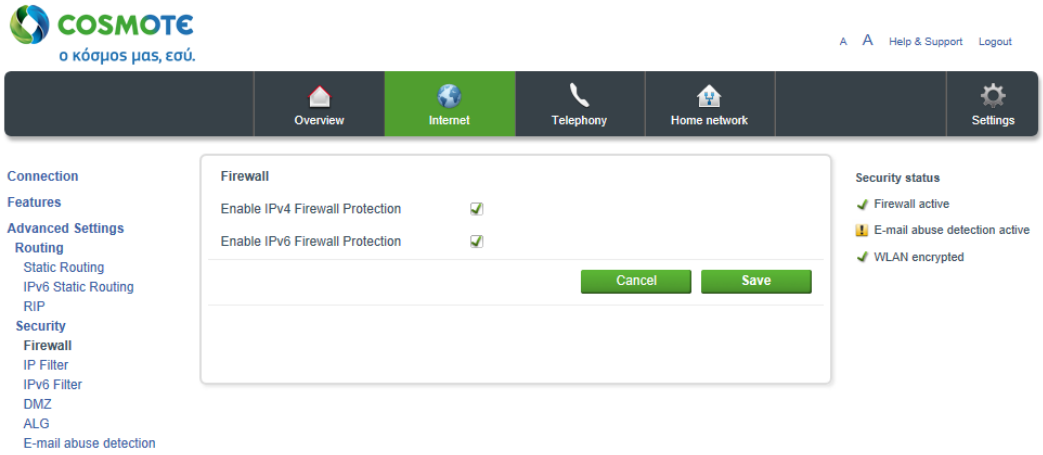
.

5.3.2 Security

5.3.2.1 Firewall

In this menu, the firewall status is presented.

Figure 5-15 Firewall



1. Click on **Firewall**.
2. Set the hook at **Enable IPv4 Firewall Protection**or **Enable IPv6 Firewall Protection.**

Notice: If you uncheck these fields your device will be unprotected.

3. When you have modified your settings, confirm the changes by clicking the tab 

. If you do not want to save your changes click on the tab 

.

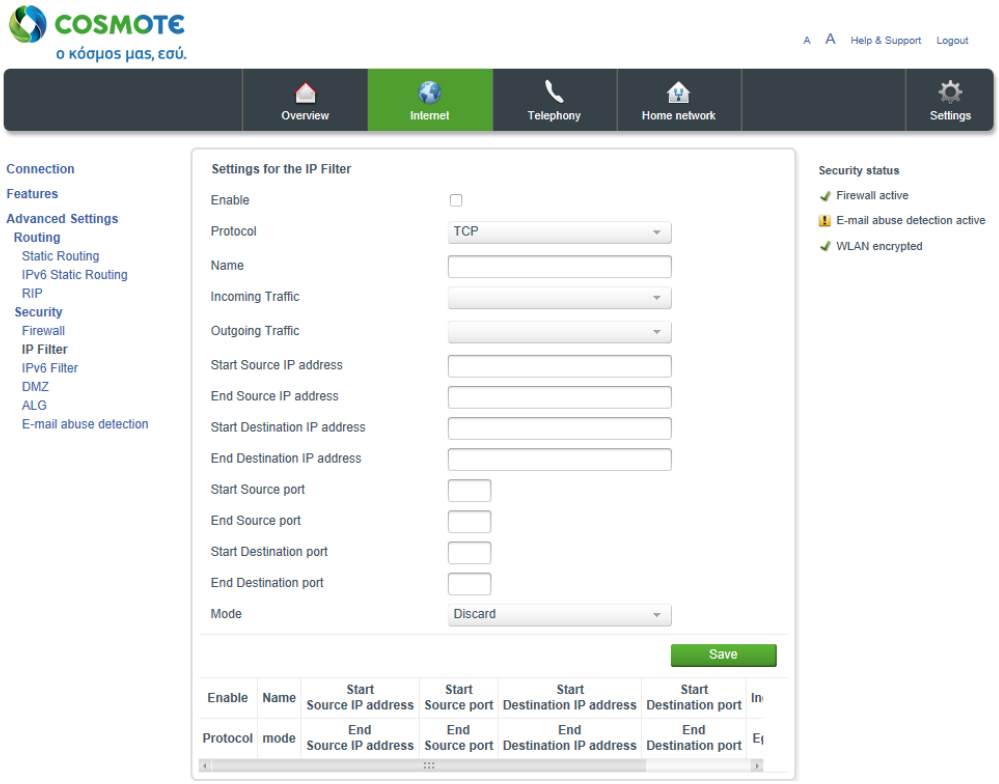
Notice: If firewall is activated on your Speedport, all incoming data packets are monitored and all incoming server requests are filtered, thus protecting your network from malicious attacks from external sources. If firewall is NOT activated on your Speedport, your network may get attacks from external sources.

5.3.2.2 IP Filter

With the IP Filter functionality, you can, for example, permit access to the Home Gateway from the Internet (WAN interface) or restrict access from the Internal network (LAN, WIFI interface) to the internet (outgoing traffic).

For the case of Incoming traffic to the device from the xDSL interface:

Figure 5-16a IP Filter (Incoming Traffic)



1. Click on **IP Filter**.
2. Configure the following parameters:

Table 5-7 IP Filter Parameters

Parameter	Description
Enable	Select the check box to enable the IP filter function.
Protocol	Select the protocol that is used for filter packets. The default is TCP.
Incoming Traffic	Select the traffic.
Start/End Source IP Address	Enter the addresses for Start/End source IP. Null value is allowed.
Start/End Destination IP Address	Enter the addresses for Start/End destination IP. Null value is allowed.
Start/End Source port	Enter the values for Start/End source port. Null value is allowed.
Start/End Destination port	Enter the values for Start/End destination port. Null value is allowed.
Mode	Choose either **Discard** or **Permit**.

3. Set the hook at **Enable**.
4. Choose the protocol (**TCP** or **UDP** or **TCP and UDP**).
5. Enter the name for a new filter in the entry field

.

6. Choose what kind of traffic you need to allow (e.g. incoming PTM Conn-x).

7. Enter start source IP address in the entry field .

8. Enter end source IP address in the entry field .

9. Enter the start/end destination port in the entry field .

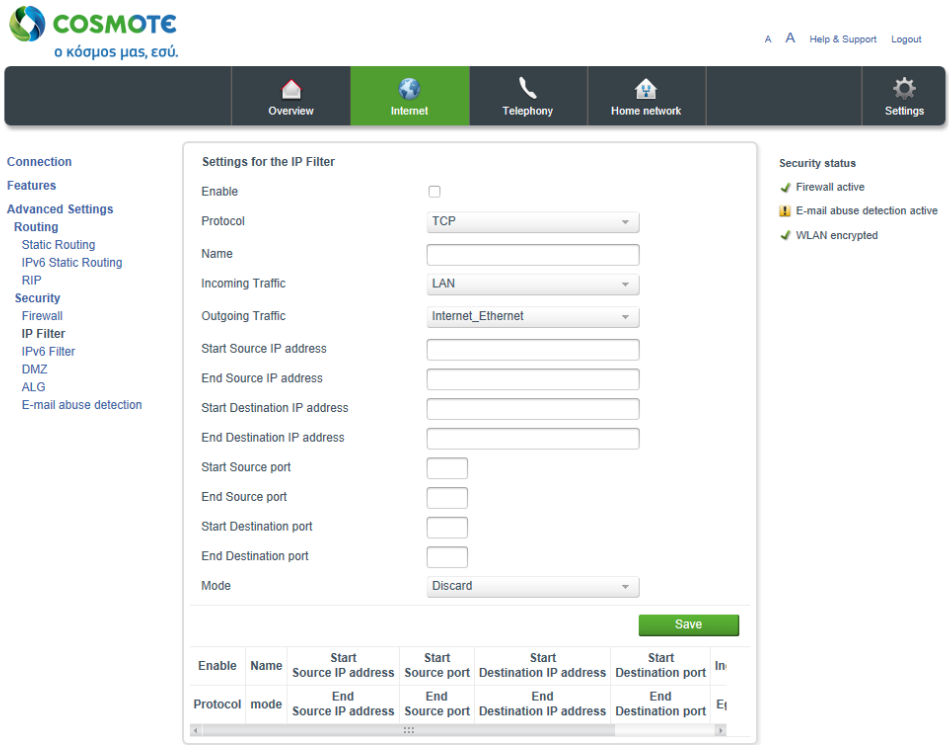
10. From the available modes (**Discard** or **Permit**) choose the mode **Permit**.
11. When you have modified your settings, confirm the changes by clicking the tab

.

Notice: If you configure 0.0.0.0 as a Start/End Source IP address, this refers to ALL IPs are allowed to access the Home Gateway.

In the case of Outgoing traffic to the device from the LAN network:

Figure 5-16b IP Filter (Outgoing traffic restriction)



1. Click on **IP Filter**.
2. Configure the following parameters:
3. Set the hook at **Enable**.
4. Choose the protocol (**TCP** or **UDP** or **TCP and UDP**).
5. Enter the name for a new filter in the entry field .
6. Choose what kind of traffic you need to allow (e.g. Outgoing Internet_VDSL Incoming LAN).
7. Enter start source IP address in the entry field .
8. Enter end source IP address in the entry field .
9. Enter start/end destination address in the enty field .
10. Enter the start/end source port in the entry field .
11. Enter the start/end destination port in the entry field .

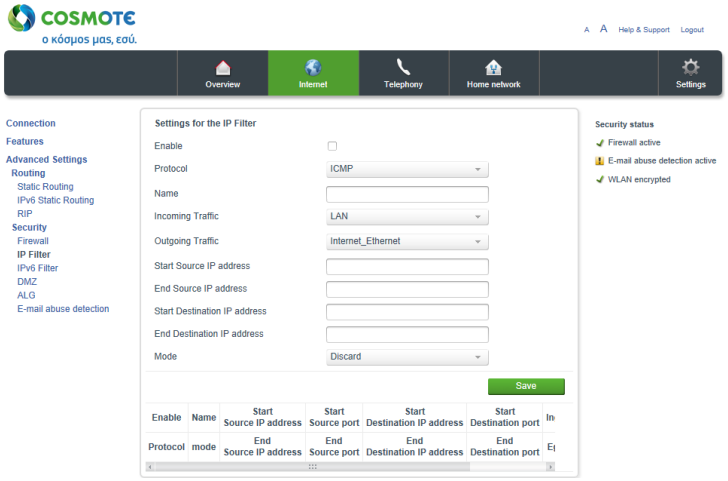
12. From the available modes (**Discard** or **Permit**) choose the mode **Discard**. By default, there is no restriction for communication between the LAN clients and Internet.

13. When you have modified your settings, confirm the changes by clicking the tab

Save.

To enable ICMP from the WAN interface to the device:

Figure 5-16c IP Filter (Enable ICMP to the WAN side of Home Gateway)



1. Click on **IP Filter**.

2. Configure the following parameters:

Table 5-8 IP Filter Parameters

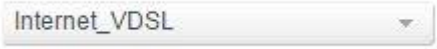
Parameter	**Description**
Enable	Select the check box to enable the IP filter function.
Protocol	Select the protocol that is used for filter packets. The default is TCP.
Incoming Traffic	Select the traffic.
Start/End Source IP Address	Enter the addresses for Start/End source IP. Null value is allowed.
Start/End Destination IP Address	Enter the addresses for Start/End destination IP. Null value is allowed.
Start/End Source port	Enter the values for Start/End source port. Null value is allowed.
Start/End Destination port	Enter the values for Start/End destination port. Null value is allowed.
Mode	Choose either **Discard** or **Permit**.

3. Set the hook at **Enable**.

4. Choose the protocol (**ICMP**).

5. Enter the name for a new filter in the entry field

.

6. Choose incoming traffic **Internet_VDSL**. 

7. Enter start source IP address in the entry field.

8. Enter end source IP address in the entry field.

9. From the available modes (**Discard** or **Permit**) choose **Permit**.

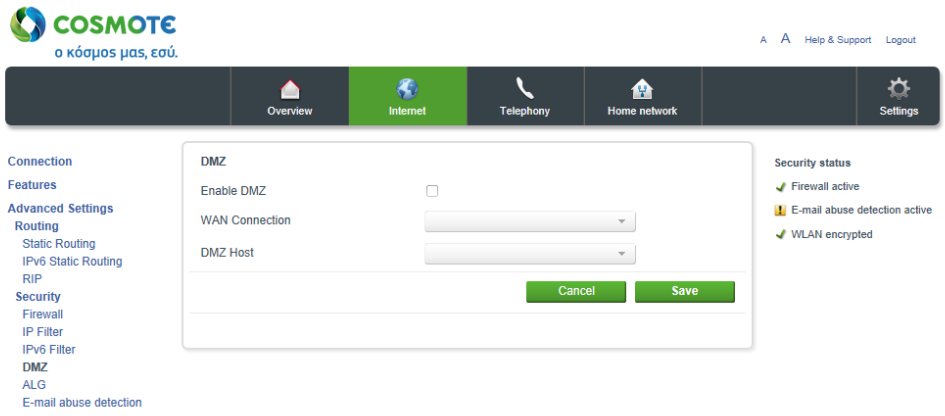
10. When you have modified your settings, confirm the changes by clicking the tab

.

5.3.2.3 DMZ

This feature, if enabled, allows the DMZ computer on your LAN to be exposed to all users on the Internet.

Figure 5-17 DMZ



1. Click on **DMZ**.
2. Configure the following parameters:

Table 5-9 DMZ Host Parameters

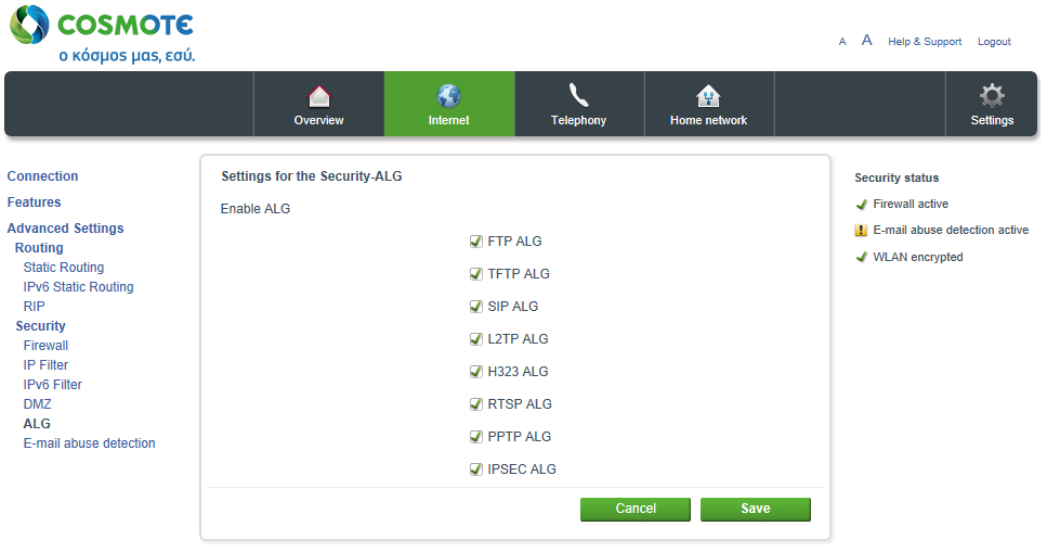
Parameter	Description
Enable	Select the check box to enable the DMZ function.
WAN Connection	Select the WAN connection used by the LAN-side host to provide services.
DMZ Host	Select the IP address of the LAN-side host.

3. Set the hook at **Enable DMZ**.
4. Choose your WAN connection from the list.
5. Choose your DMZ host from the list.
6. When you have modified your settings, confirm the changes by clicking the tab Save. If you do not want to save your changes click on the tab Cancel.

5.3.2.4 ALG

Configure the settings for the Security-ALG.

Figure 5-18 ALG



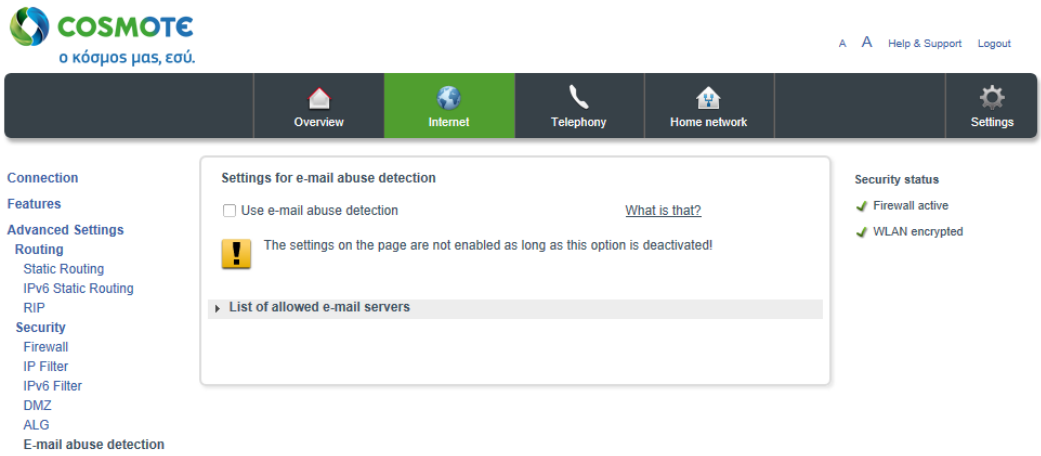
1. Click on **ALG**.
2. Set the **hooks** with the protocols. By default, every protocol function is permitted
3. When you have modified your settings, confirm the changes by clicking the tab Save. If you do not want to save your changes click on the tab Cancel.

Notice: If you are using femtocells or any application software that uses IPSec protocol you are advised to leave the default values as they are.

5.3.2.5 E-mail abuse detection

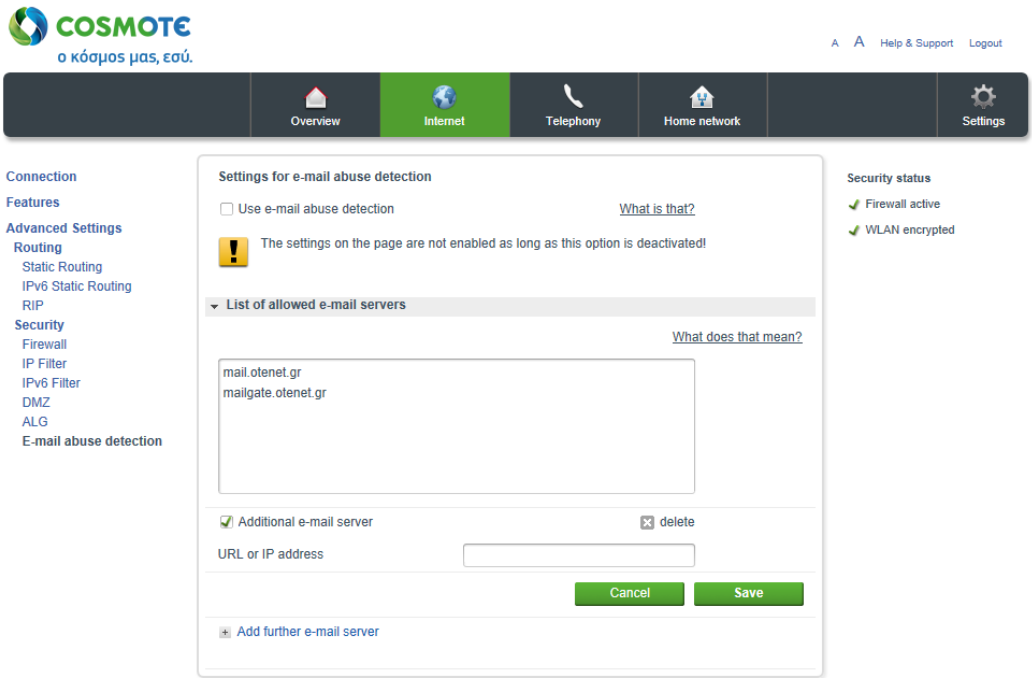
The list of secure E-mail server helps for reduction of the worldwide E-mail spamming. Just the listed E-mail server (Mail outbox server) are cleared for the use of a local E-mail program (i. e. Microsoft Outlook, Mozilla Thunderbird or Apple Mail). All other mail outbox servers are being filtered. If you want to use an additional mail outbox server, you can add up to five additional E-mail servers below the list.

Figure 5-19 E-mail abuse detection



1. Click on **E-mail abuse detection**.
2. Set the hook at **Use e-mail abuse detection**.

Figure 5-20 List of allowed e-mail servers



3. Click on **List of allowed e-mail servers**.
4. If you want to add extra E-mail servers, enter the URL or IP address of the additional E-mail server in the entry field 
5. When you have modified your settings, confirm the changes by clicking the tab  . If you do not want to save your changes click on the tab  .

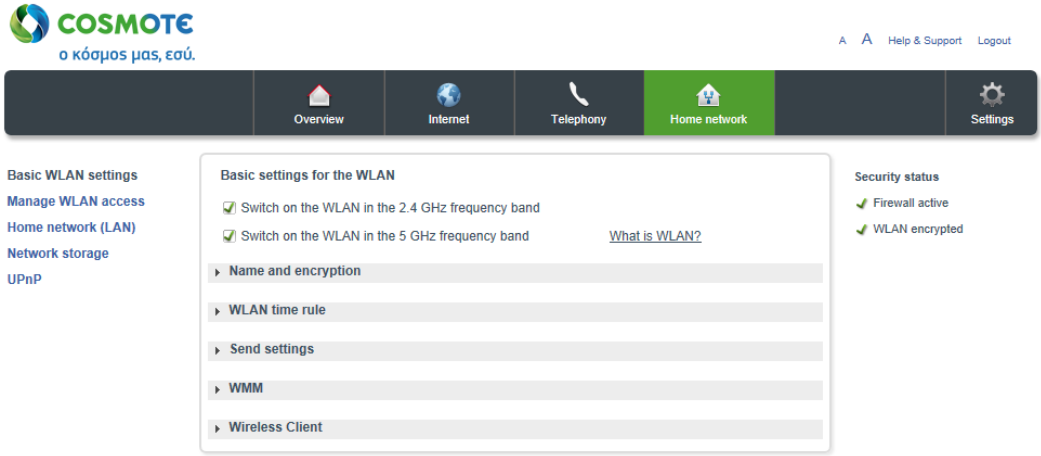
Notice: If the delivery of E-mails does not work with your local E-mail program please check, whether the outgoing mail server in use is listed under the secure E-mail server.

Chapter 6 Home Network Menu

The Wireless home network or WLAN (Wireless Local Area Network) consists over components, which are connected via radio wave. It enables the Wireless connection of your notebook, your printer or other WLAN capable devices with your Speedport. You have two frequency bands available.
In the menu **Basic WLAN settings** you can modify the WLAN settings according to your requirements. You can assign WLAN names, set different encryption methods, configure timer and modify the transmission settings.

6.1 Basic WLAN settings

Figure 6-1 Basic settings for WLAN



1. Click on **Basic WLAN settings**.
2. Put the hook at **Switch on WLAN in 2.4-GHz frequency band**, if you want the WLAN function to be activated in the respective frequency band.
3. Put the hook at **Switch on WLAN in 5-GHz frequency band**, if you want the WLAN function to be activated in the respective frequency band.

Suggestion: Remove both Hooks, if you want to deactivate WLAN.

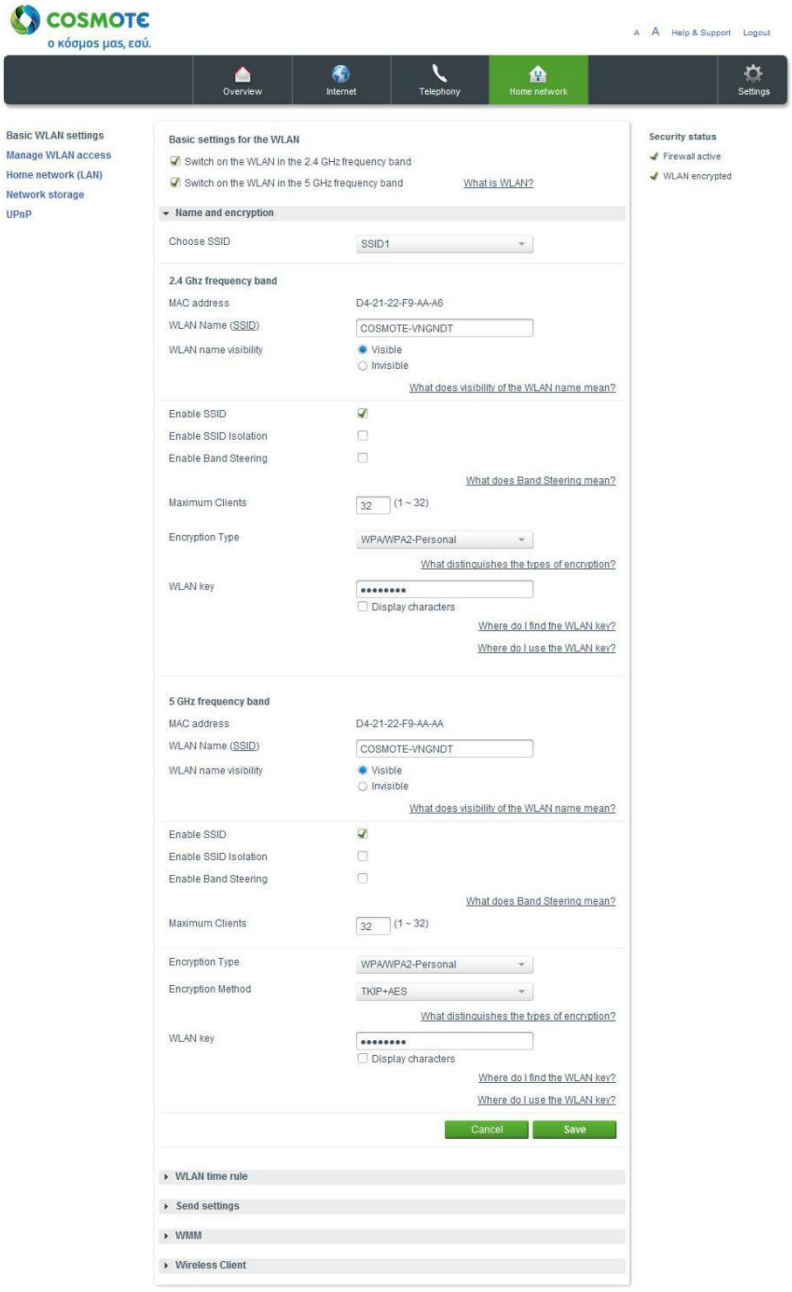
Suggestion: By pressing the WLAN button on the front side of your Speedport frequency bands will be activated and deactivated at the same time.

6.1.1 SSID Settings

The **WLAN name**, also called SSID (Service Set IDentifier) helps to distinguish between Wireless home networks in the same location. The **WLAN name** must be known for every device that is connected to the WLAN.

Notice: The basic settings for the WLAN name (SSID) and the encryption can be found on the back side label of your Speedport device.

Figure 6-2 Name and encryption



1. Click on **Basic WLAN settings**.
2. Configure the following parameters:

Table 6-1 Parameters for SSID Settings

Parameter	Description

Choose SSID	There are three SSIDs: • SSID1 • SSID2 • SSID3
WLAN Name	Enter the SSID. We suggest you to change the SSID to one of your preference.
WLAN name visibility	Choose either Visible or Invisible. If you choose Invisible then you must manually configure at your Wi-Fi capable device the Wi-Fi name and settings.
Enable Band Steering	Band steering is a technology that detects whether or not the wireless client is dual-band capable, and if it is, it will push the client to connect to the less congested 5GHz network. It does this by actively blocking the client’s attempts to associate with the 2.4GHz network. In order to use this feature, SSIDs of 2.4GHz and 5GHz bands must be same in current screen, and Band Steering must be enabled in both SSIDs.
Enable SSID Isolation	When you select this check box, the subscribers with different SSIDs cannot communicate with each other.
Maximum Clients	The range is from 1 to 32.
Encryption Type	There are six types (default is WPA/WPA2-Personal): • WPA2-Personal (very secure) • WPA/WPA2-Personal • WPA2-Enterprise • WPA/WPA2-Enterprise • WEP • Unencrypted
Encryption Method	There are three methods (default is TKIP+AES): • TKIP • AES • TKIP+AES (default)
WLAN Key	Enter the WLAN key in each computer that you want to connect to the WLAN. It is suggested that you change your WLAN key to a one of your preference.

3. Click on the statement **Name and encryption.**

4. Enter the WLAN name (SSID) for each frequency bands in the entry field

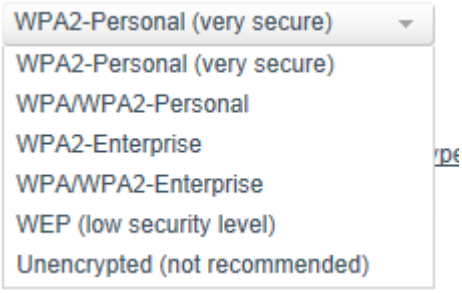
.

Notice: The WLAN name (SSID) can also be 32 signs long and consist of numbers, letters and special signs. It should not contain information about the identity of the

Wireless home network, meaning no family or company names as well as birth days. Please observe the upper and lower case. The connection to network capable devices, which do not use valid WLAN names (SSID) will be interrupted until valid WLAN names (SSID) are also established there.

5. Choose the WLAN name, which is to be displayed (**visible** or **invisible**).

6. Choose the type of encryption from the list.



Notice: The very secure WPA2 encryption is the default setting.

Suggestion: WPA and WPA2 use dynamic keys based on the protocol TKIP (Temporal Key Integration Protocol) or AES (Advanced Encryption Standard), and provides highest security. We suggest choosing WPA2 as encryption, if this is supported by all components of your home network. Every network capable device that is to access the WPA-2 protected wireless home network has to support WPA2. In the instruction manual of the respective device you will find the information about whether you can use the WPA2 encryption.

Notice: If you want to connect network capable devices in your wireless home network, which do not support the encryption types WPA or WPA2, you can set the encryption type to WEP (Wired Equivalent Privacy).

7. If you want to change the WLAN key, enter the new WLAN key in the entry field

.

Notice: When you save the changes, the radio connection is interrupted that long, until you have the changes implemented in the settings of your network capable device.

8. When you have modified your settings, please confirm the changes by clicking the tab 

. If you do not want to save your changes, click on the tab 

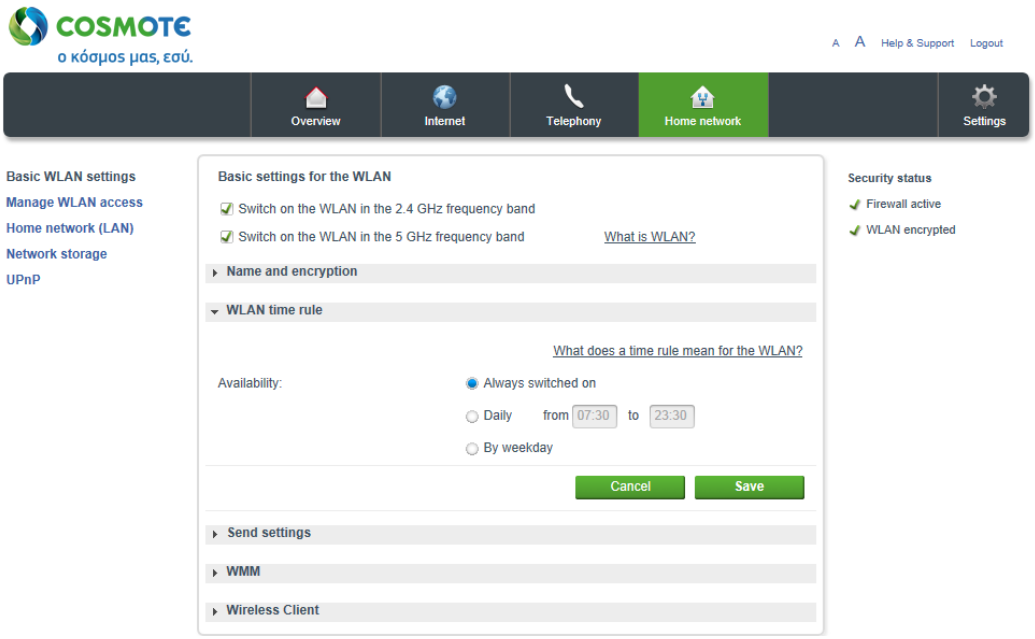
.

6.1.2 WLAN time rule

With the timer of the Wireless home network you have the possibility to administer your WLAN with timer activation. The option **always switched on** on the WLAN, stays active and available all the time and it is the default one. Beside that you have the possibility to activate WLAN in a defined time window or on a certain weekday.

Notice: Active WLAN connections will, after time window expiry, not be interrupted but cannot be rebuilt outside of the time window.

Figure 6-3 WLAN time rule



1. Click on **Basic WLAN settings**.
2. Click on **WLAN time rule**.
3. Define the time window (**Always switched on**, **Daily** or **By weekday**), in which WLAN is supposed to be available.
4. If you want the WLAN available daily at the same time, please enter the time window behind the statement **Daily**.
5. If you activate the WLAN on particular weekdays, you can set a specific day time for every day. Enter the time frames behind the respective option **By weekday**.

Notice: You can also set up day overlapping rules.

6. When you have modified your settings, please confirm the changes by clicking the tab 

. If you do not want to save your changes, click on the tab 

.

6.1.3 Send settings

In the menu **Send settings** you can define the transmission performance, the transmission mode, the speed and the channel of your Wireless network.

Transmission performance.

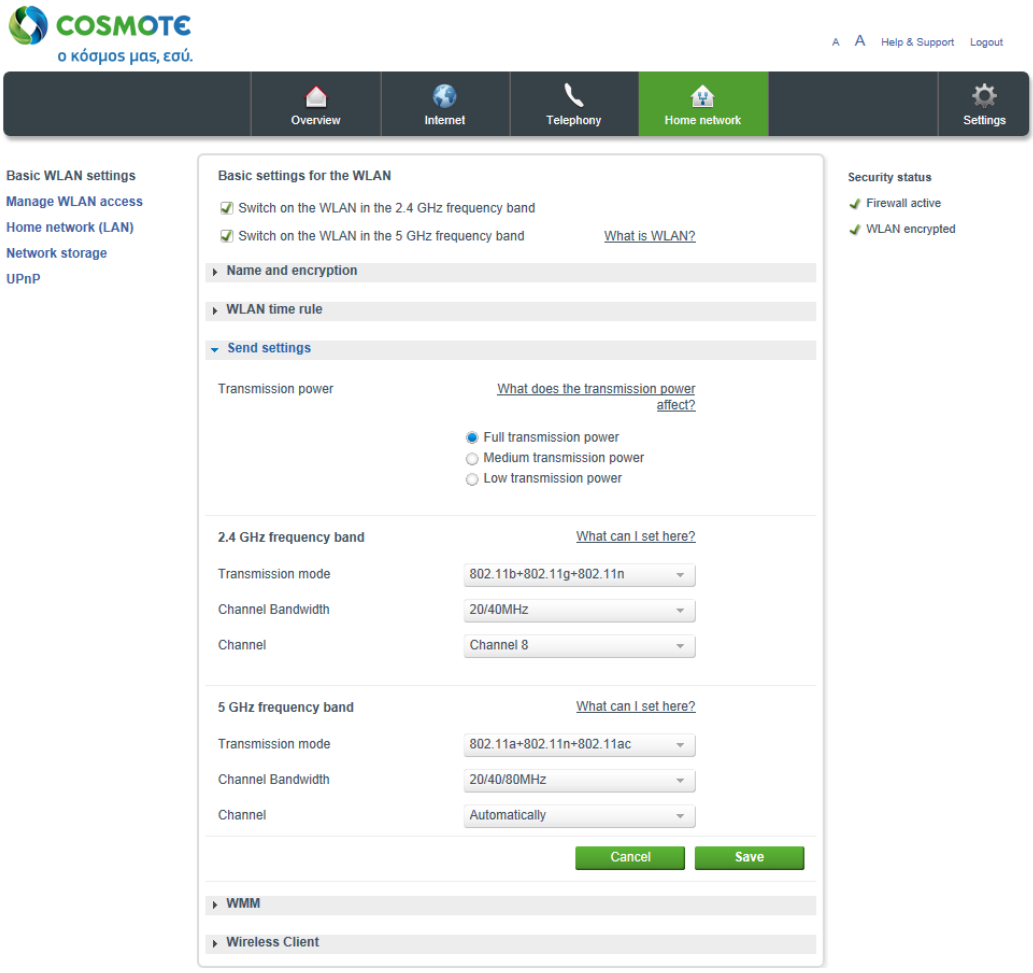
Here you can set the transmission performance, with which your Speedport communicates with other network capable devices in the Wireless home network. If your network capable devices are placed nearby your Speedport you can reduce the transmission performance. You can change the range of your Wireless network as follows:

· Full transmission performance = maximum range (100 % transmission performance).

· Middle transmission performance = middle range (31 %-60 % transmission performance).

· Low transmission performance = low range (15 %-30 % transmission performance).

Figure 6-4 Send settings



1. Click on **Basic WLAN settings**.
2. Click on the statement **Send settings**.
3. Choose with which **Transmission power** your Speedport shall operate.

Suggestion: We suggest choosing the **Transmission power** so that the range is modified to the spatial conditions in which the home network is established. High transmission performances facilitate unauthorized access to your Wireless data transmission.

Transmission mode.

The transmission mode states, which standard should be used for the transmission of data. If one of your network capable devices does not support the transmission modes of the standard settings or have difficulties with the transmission, you can change the transmission mode here.

· 802.11b: max. 11 Mbit/s
· 802.11g: max. 54 Mbit/s
· 802.11n: max. 300 Mbit/s
· 802.11ac: max. 866Mbit/s

Normally Speedport chooses the best radio channel for the transmission. Yet you can choose the radio channel by yourself. But please notice, that, between your radio channel in use and the used radio channel in your environment, at least four channels have to remain unused. With this way you can use your wireless home network without interference. Please also notice that the radio channels 12 and 13 are not supported by all network capable devices.

Notice: You can modify the settings separately for both frequency bands.

1. Click on **WLAN basic settings**.
2. Configure the following parameters:

Table 6-2 Send Settings Parameters

Parameter	Description
Transmission power	There are three options: • Full transmission power (default) • Medium transmission power • Low transmission power
Transmission mode	There are three modes for 2.4GHz: • 802.11b+802.11g • 802.11g+802.11n • 802.11b+802.11g+802.11n (default) There are three modes for 5GHz: • 802.11ac • 802.11+802.11ac • 802.11a+802.11n+802.11ac (default)
Speed	It is chosen automatically by the device.
Channel	Select the best wireless channel for transmission.
Rate Limit	Choose the option for rate limit.

3. Click on **Send settings**.
4. Choose depending on the frequency band the transmission mode form the respective list.
5. Select Channel Bandwidth to 20/40MHz or 20/40/80MHz, if you want to increase the maximum transmission speed to 300 Mbit/s or 866 Mbit/s (5G Band Only).
6. Choose the radio channel from the list, in which the transmission for the home network is to be carried out. We suggest to choose **Automatically**. Choose specifically channel 1 or 6 or 11, if you have already scan your environment to find a

least congested frequency channel. Automatic mode may choose to use wireless channels that are being overlapped.

Suggestion: The available radio channels differ by their frequency width.

Notice: The available radio channels are defined by country specific rules and can be limited. That is why that some network components might not support all channels.

7. When you have modified your settings, please confirm the changes by clicking the tab 

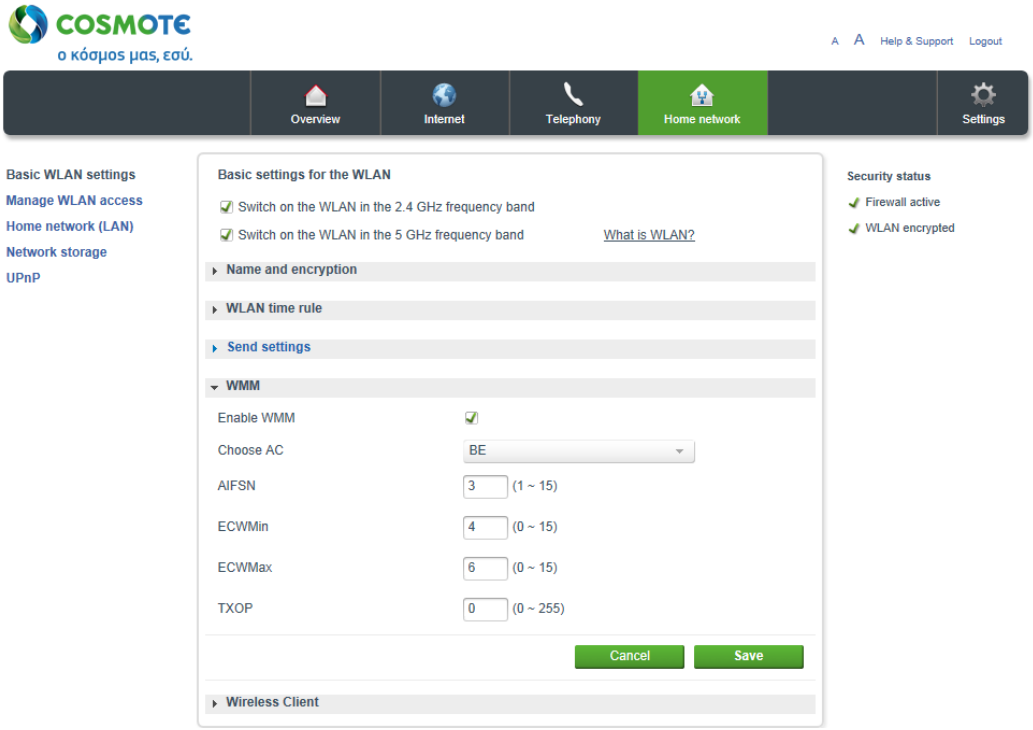
If you do not want to save your changes, click on the tab 

.

6.1.4 WMM

Perform this procedure to configure WLAN WMM.

Figure 6-5 WMM



1. Click on **Basic WLAN settings**.
2. Click on the statement **WMM**.
3. Set the parameters as required.

Table 6-3 WMM Parameters

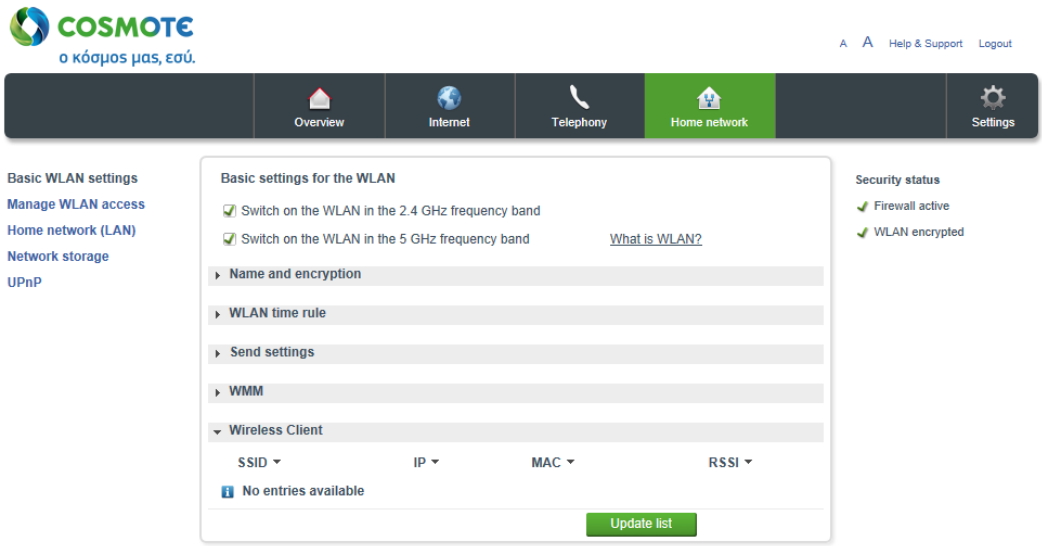
Parameter	Description
Choose AC	There are four options: • BE (default) • BK • VI • VO
AIFSN	Arbitration inter frame spacing number Range: 2–15
ECWMin	Exponent form of minimum competition window Range: 0–15

ECWMax	Exponent form of maximum competition window Range: 0–15
TXOP	Transmission opportunity limit Range: 0–255

6.1.5 Wireless Client

Perform this procedure to configure Wireless client.

Figure 6-6 Wireless Client



1. Click on **Basic WLAN settings**.
2. Click on the statement **Wireless Client**.
3. The list will displayed **SSID**, **IP**, **MAC** and **RSSI** of the client, if there is any entry.

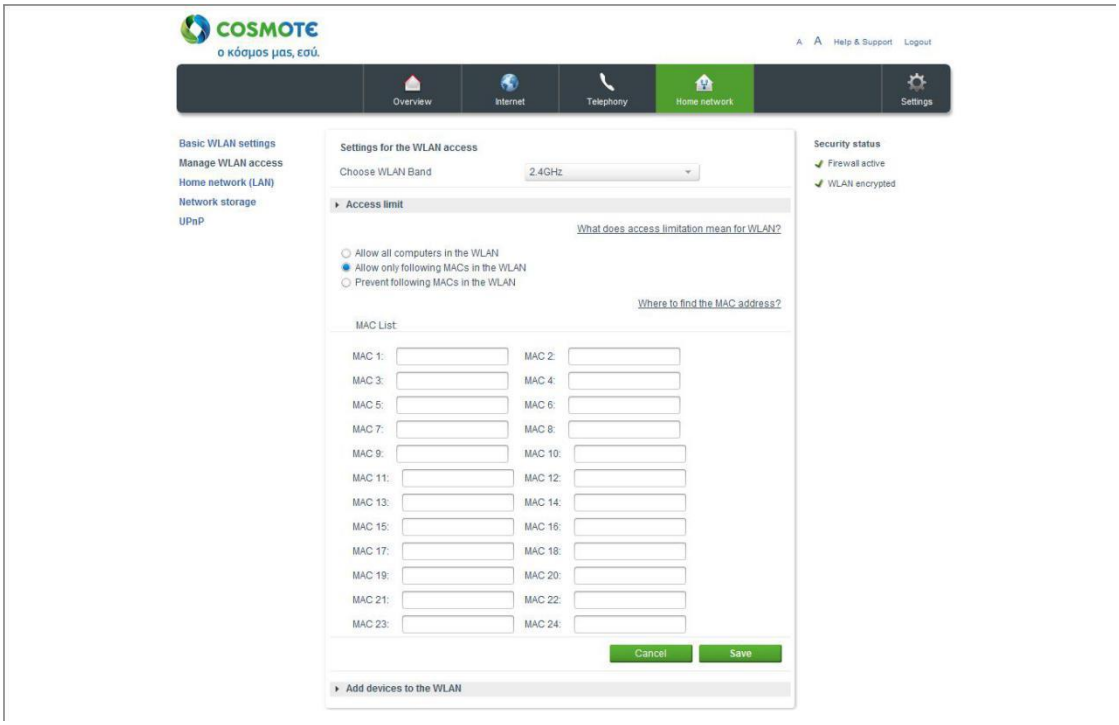
6.2 Manage WLAN access

Define which Wireless devices may access the Wireless home network and embedded network capable devices per WPS (Wireless Protected Setup).

6.2.1 Access limit

Here you can set which network capable devices can access the Wireless home network.

Figure 6-7 Access Limit



1. Click on **Manage WLAN access**.
2. Click on **Access limit**.
3. Choose one of following options to control network capable devices inyour Wireless home network.

Allow all computers in the WLAN - Allow all wireless devices in your wireless home network.

Allow only following MACs in the WLAN - It's a white list. Only wireless device whose MAC address in the MAC list can work in your wireless home network.

Prevent following MACs in the WLAN - It's a black list. Wireless device whose MAC address in the MAC list cannot work in your wireless home network.

Notice: These network capable devices still need a WLAN keyin order to access yourWireless home network.

4. When you have modified your settings, please confirm the changes by clicking the tab Save . If you do not want to save your changes, click on the tab Cancel .

Add network capable devices via WPS to the wireless home network.

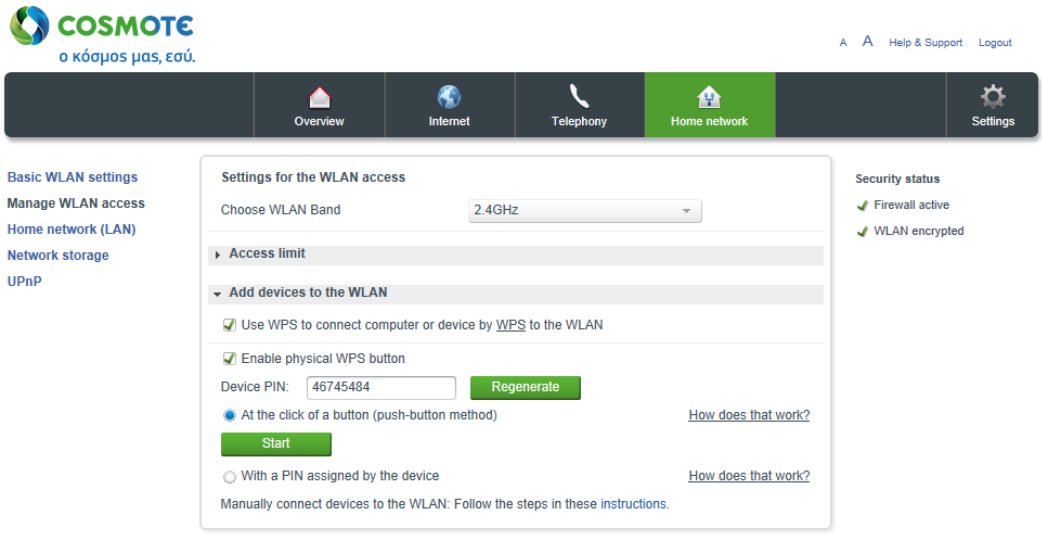
You can connect network capable devices via WPS (Wireless Protected Setup) with your wireless home network. WPS helps the easy embedment of network capable devices in your protected wireless home network. One requirement is, the network capable components to support WPS.
You can connect your network capable devices by pressing a button (PBC method) or PIN entry with your wireless home network.

Suggestion: If you use the encryption WEP, you cannot add network components via WPS to your Wireless home network. We suggest the use of the very secure WPA2 encryption.

6.2.2 WPS

Here you can set which network capable devices can access the Wireless home network.

Figure 6-8 WPS (push-button method)



1. Click on **Manage WLAN access**.
2. Click on **Add devices to the WLAN**.
3. Set the hook at **use WPS to connect computer** or **device by WPS to the WLAN**.
4. Choose the option **push-button method**.
5. Press the registration button (WLAN button) on the front side of your Speedport

or click the tab 

. During the connection procedure the illuminated display WLAN blinks on Speedport.

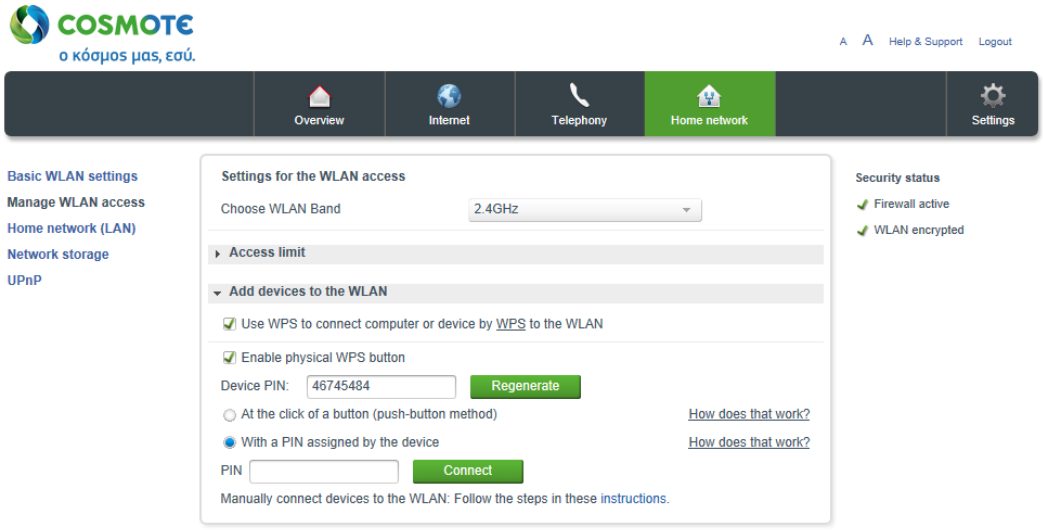
6. Operate within two minutes the (Software) WPS button on the network capable device, which you want to connect.

Notice: The button should be pressed for more than 5 seconds in order to use the push-button method.

After that a protected connection to your Wireless home network is being established. This procedure can take a few moments, while the illuminated display for **WLAN** blinks on Speedport.

WPS with PIN method

Figure 6-9 WPS (PIN method)



1. Click on **Manage WLAN access**.
2. Click **Add devices to the WLAN**.
3. Set the hook at **use WPS to connect computer or device by WPS to the WLAN**.
4. Choose the option **With a PIN assigned by the device**.

Suggestion: You can get the necessary PIN from the software or the instruction manual of the network capable device.

5. Enter the PIN in the entry field 

.

6. Click on the tab 

.

After that a protected connection to your Wireless home network is being established. This procedure can take a few moments, while the illuminated display for **WLAN** blinks on Speedport.

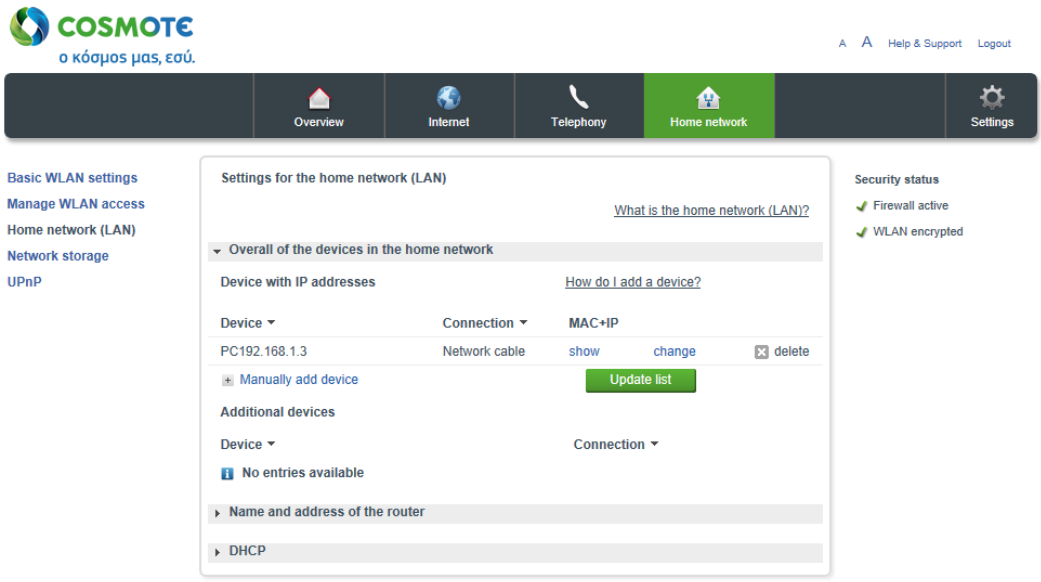
6.3 Home network (LAN)

The cabled home network or LAN (Local Area Network) consists of the network components in your household. Your Speedport serves as central interface for all these components inside of your network and as a hub to the internet. If you have several network capable devices in your household which may access the internet at the same time, exchange data, use the same printer or access data on a central hard drive, you can synchronize these with your Speedport.

6.3.1 Overview on the devices in the home network

Here you can administer and see the devices in the home network (Network Cable or WLAN).

Figure 6-11 Overview of all devices of internal network (LAN/WLAN)



1. Click on **Home network (LAN)**.
2. Click on **Overall of the devices in the home network**.
3. Click in the list with **Devices with IP addresses** on the statement display, if you want to see IP address and the MAC address of the respective network capable device.

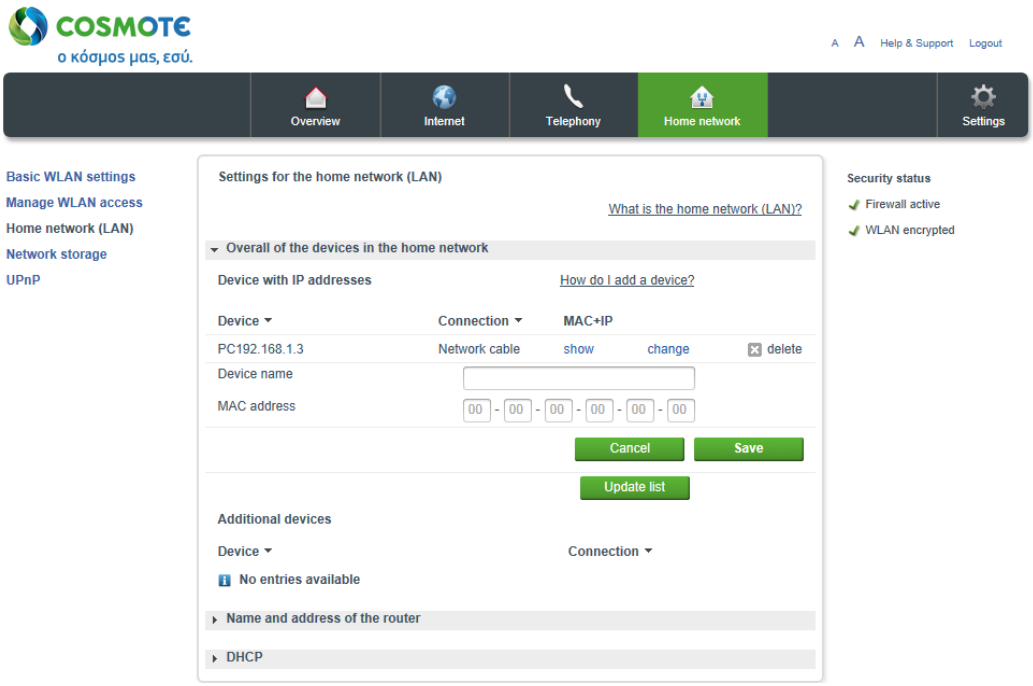
4. Click on the tab Update list, if you want to update the list of the attached devices.
5. The entries can be arranged in accordance with device name and type of connection. Click on the statement **Device** or **Connection** in order to carry out the arrangement.

Notice: If you want to separate attached storage devices from Speedport, click on 'Disconnect' option at the respective storage device before you really disconnect it. Or else data loss or malfunction may occur in your external storage device.

Manually add device

You can also add manually network capable devices in your home network. This might be necessary if you have established access limits for your home network and you want to add a new network capable device.

Figure 6-12 Manually add a device



1. Click on **Home network (LAN)**.
2. Click on **Overall of the devices in the home network**.
3. Click on **Manually add device**.
4. Enter the device name in the entry field Netbook.

5. Enter the MAC addresses of the respective network capable device in entry fields E3 - 12 - C4 - 55 - DE - 9A. The MAC addresses can be found in the system or network information of the device.

6. Once you have modifieded the settings, confirm the changes by clicking the tab Save. If you do not want to save changes, click on the tab Cancel.

Additional devices in the home network

1. Click on **Home network (LAN)**.
2. Click on **Overall of the devices in the home network**.
3. Under the statement **Additional devices** you can see connected devices to your Speedport.
4. The entries can be arranged in accordance with type of connection or device name. Click on the entry **Device** or **Connection** to carry out the arrangement.

Notice: If you want to separate the connected storage media from Speedport, click on disconnect before physically removing it. Otherwise, loss of data or malfunctioning may occur to your USB device.

6.3.2 Name and address of the router

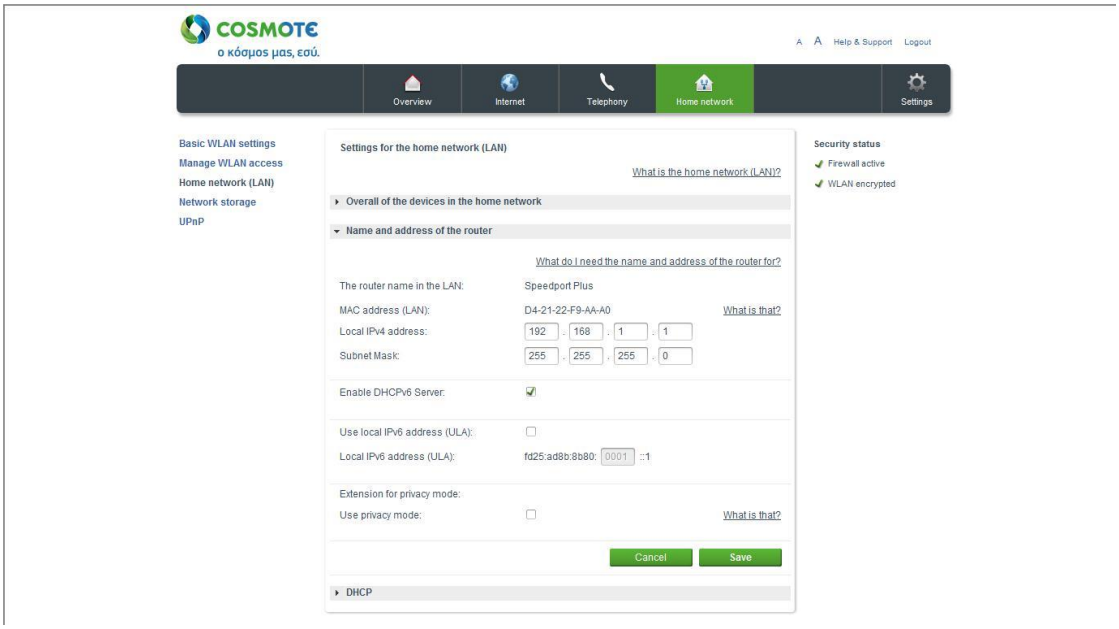
You need the IP address of your Speedport for example, in order to have access to the user interface.

Suggestion: For access to user interface enter the IP address of your Speedport in the address line of your internet browser. In the default settings the IP address of your Speedport is **192.168.1.1.**

1. Click on **Home network (LAN)**.
2. Click on **Name and address of the router**, if you want to see the name, the MAC address and the local IP settings.

Change local IPv4 address

Figure 6-13 local IPv4 address



Notice: If you use the automatic assignment of IP (DHCP) address to your network capable devices, it might be necessary after a change to reestablish the connection to the home network once more.

1. Click on **Home network (LAN).**
2. Configure the following parameters:

Table 6-4 IPv4/v6 Parameters

Parameter	Description
Local IPv4 address	IPv4 address of the device in the LAN.
Subnet Mask	Subnet mask of the device in the LAN.

3. Click on **Name and address of the router**.
4. Enter the new IPv4 address in the entry field 

.
5. Once you have modified the settings, confirm the changes by clicking the tab

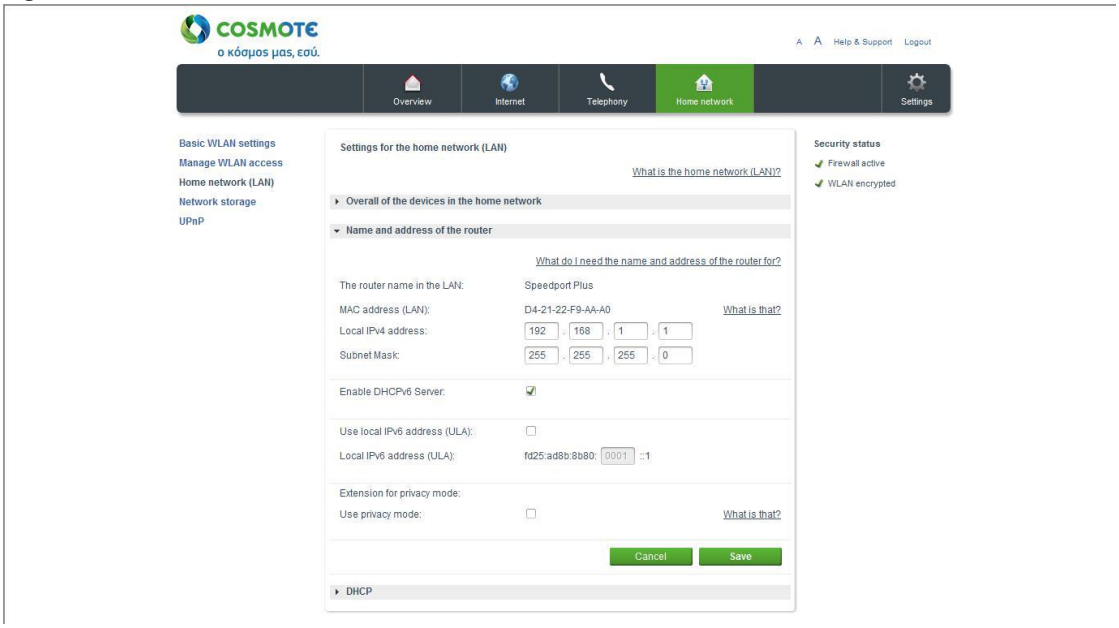
. If you do not want to save changes, click on the tab

.

Tip: We suggest not to change the IP address. If you decide to change the IP address, please make a written note about that.

Use local IPv6 address

Figure 6-14 Local IPv6 address



1. Click on **Home network (LAN)**.
2. Configure the following parameters:

Table 6-5 IPv6 Parameters

Parameter	Description
Local IPv6 address	IPv6 address of the device in the LAN.

3. Click on **Name and address of the router**.
4. If you want to use local IPv6 address, set the hook at **Use local IPv6 address (ULA)**.
5. Once you have modified the settings, confirm the changes by clicking the tab

Save . If you do not want to save changes, click on the tab

Cancel .

Change local IPv6-Address

1. Click on **Home network (LAN)**.
2. Click on **Name and address of the router**.

3. Enter the new IPv6 address in the entry field, for example,

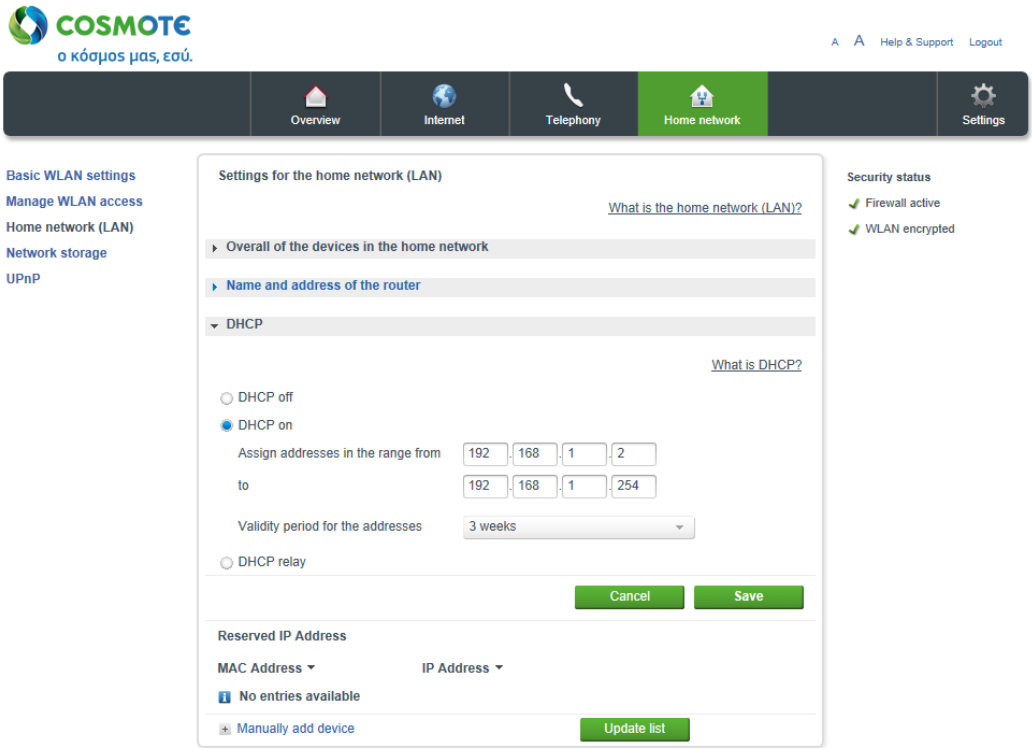
4. Once you have modified the settings, confirm the changes by clicking the tab

. If you do not want to save changes, click on the tab

.

6.3.3 DHCP

Figure 6-15 DHCP



1. Click on **Home network (LAN)**.
2. Configure the following parameters:

Table 6-6 DHCP Parameters

Parameter	Description
DHCP on/off	Turn on/off the DHCP server.
Assign addresses in the range from	DHCP address pool.
Validity period for the addresses	Select the time period for the validity of the addresses.
DHCP Relay	Select the check box to enable the DHCP Relay function.

3. Click on **DHCP**.
4. Choose the option **DHCP off**, if you want to carry out the assignment of the IP address by yourself. You can then assign manually to every connected network capable device an IP or an IP address area from your Speedport (192.168.1.xxx).

Choose the option **DHCP on**, if your Speedport should carry out the address assignment automatically by itself. In order to make the assignment of IP addresses work, the option **Receive IP addresses automatically** or **DHCP** should be activated for the connected network capable devices in the network settings.

Notice: The configurable address area in the standard settings lies between 192.168.1.2 and 192.168.1.254. The address area can be limited further by configuring the start and end addresses. The time of validity of IP addresses can be preset. After this validity has expired the connected device requests automatically to the new IP address from the available address area.

5. Once you have modified the settings, confirm the changes by clicking the tab

. If you do not want to save changes, click on the tab

.

Notice: If DHCP is activated on your Speedport, it configures the network settings of the connected network capable devices if the option 'Receive IP address automatically' is activated on the Network Settings of your devices.

6.4 Network Storage

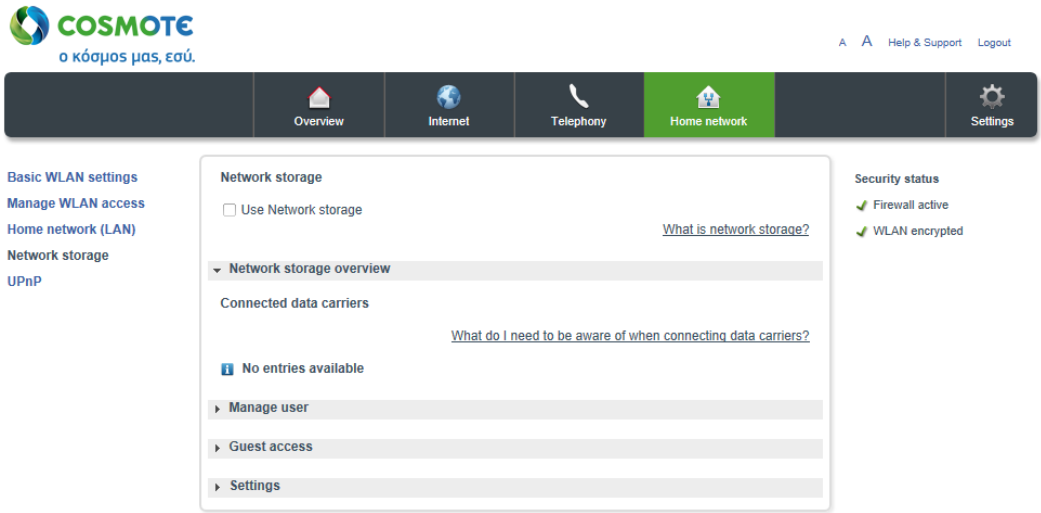
The network storage (NAS = Network Attached Storage) is a data carrier, which is available for your home network. This could be an external data carrier, as for example USB hard drive or sticks, which are connected to your Speedport.
The network storage makes it possible to dispose data centrally and if necessary recall it via all connected devices in the home network or via the internet (FTP/FTPS access).

Notice: The establishment of the network storages is just possible with data carrier, which are formatted in the data systems HFS+, FAT32 or NTFS.

6.4.1 Network storage overview

Here you can see and administer the available network storages.

Figure 6-16 Network storage overview



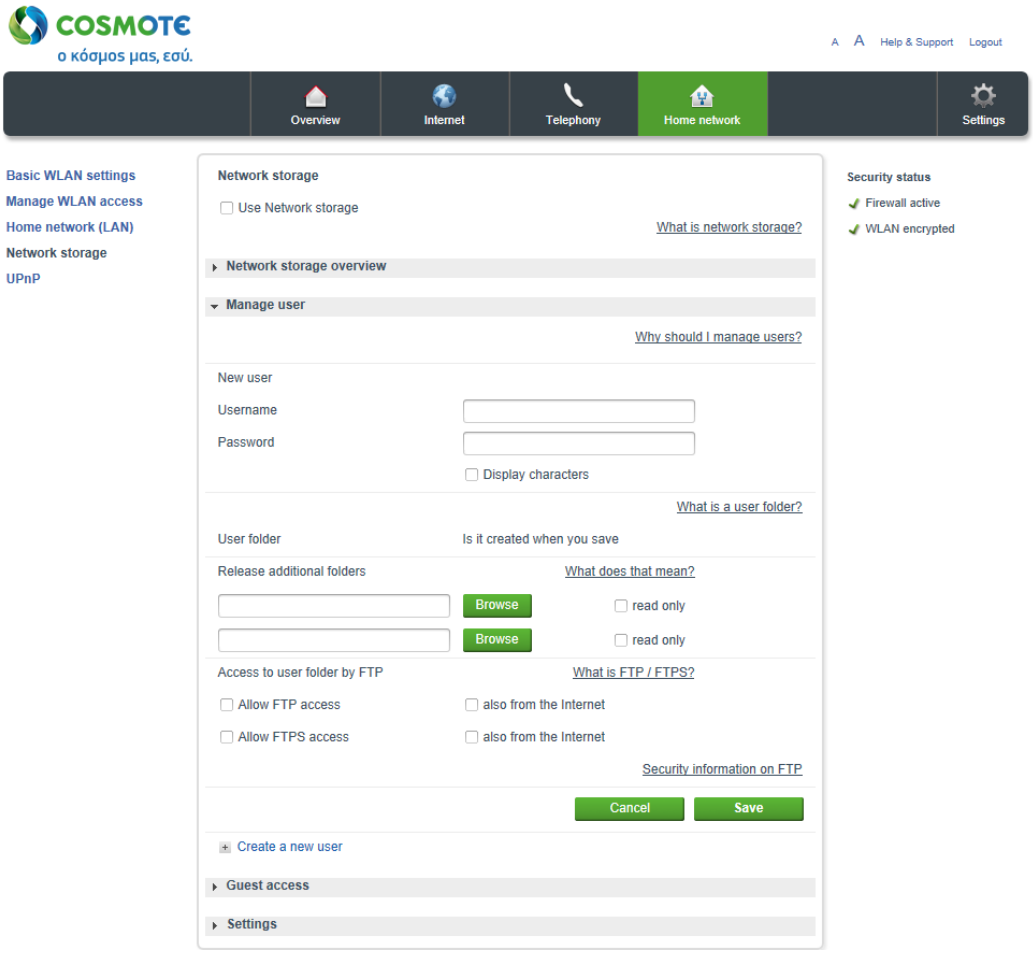
1. Click on **Network storage**.
2. Click on the statement **Network storage overview**.

3. Under the statement **Connected data carriers** you can see the connected data carriers, which are connected via USB. The bar chart informs you about the storage, which is already taken.

6.4.2 Manage User

Establish user accounts, with which you can access connected data carrier and printers. You can clear all contents or just single file folders or data carriers for the users. Like this you have the possibility, to lock or clear created folders in your network storage (NAS) for distinct users.
The user data will be carried by the networkable devices, if these are trying to access the network storage (NAS) or the printer.

Figure 6-17 Create user



1. Click on **Network storage**.
2. Click on **Manage user**.
3. Click on **Create a new user**.

Notice: For creating a user, it is mandatory, that a USB data carrier is attached to the Speedport.

4. Enter the name of the user in the entry field 

.

5. Enter the personal password, that will be used for the user in the entry field


.

Notice: Choose secure passwords. We suggest a combination of numbers and letters (Upper and lower cases) with at least eight signs, which do not make any recognizable sense (i.e. H7zt9kkoM5).

6. The user folder will be created automatically on a connected USB storage during saving of the user account. The user folder is exclusively available for the user with reading and writing rights. Other users cannot access it. Just a user with administrator rights can access the folder.

Notice: For registration at the network storage with administrator rights use the user name admin and the device password of your Speedport.

7. Click on 

, if you want additional folders cleared for the user.

Notice: For every user at most two folders can be cleared.

8. Set the hook at **read only**, if user just should have reading rights in the additional folder.
9. Click on **Release additional folders**, if you want to make additional folders accessible for the user.
10. Once you have adapted the settings, confirm the changes by clicking the tab

. If you do not want to save changes, click on the tab

.

6.4.3 Access via FTP/FTPS

FTP (File Transfer Protocol) is a protocol for data transmission. Allow the access, if you want to access your network storage (NAS) via internet from far. FTPS (FTP via SSL) is an encrypted variant and therefore more secure than FTP.

Suggestion: You can also access from your home network via FTP/FTPS to the network storage connected to your Speedport.

For the access via internet your Speedport has to get a name in the internet. For that you can choose from different services for dynamic DNS, i. e. dyndns.org. If you have booked a service enter the access data in the menu Internet - DDNS.

Suggestion: Further information for the settings of dynamic DNS can be found in the section DDNS.

With an FTP program you can with every networkable device on your network storage and exchange data.

1. Click on **Network storage**.
2. Create a user first (see chapter **Create user**)
3. Set the hook at **Allow FTP access** or at **Allow FTPS access**, if you want to allow access via FTP or FTPS.
4. Set the hook at **also from the internet**, if you want to allow access from the internet as well. If you do not set this hook, you will just reach your network storage via FTP from within your home network.

Notice: Via FTP the authentication data (User name, personal password) and the data transmission will be sent unencrypted. We suggest the use of FTPS.

5. Once you have adapted the settings, confirm the changes by clicking the tab 

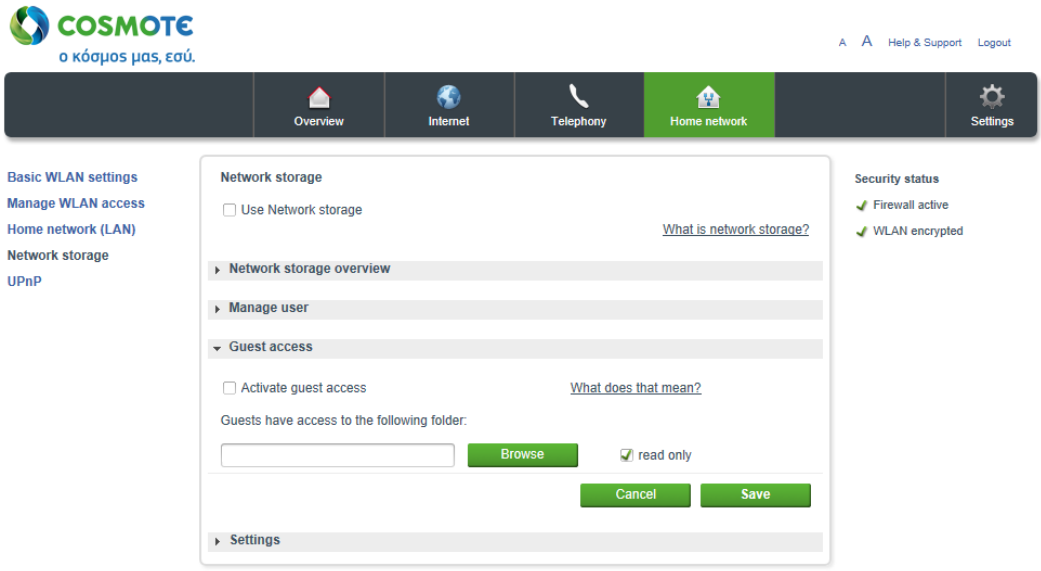
. If you do not want to save changes, click on the tab 

.

6.4.4 Guest access

With guest access you can easily grant access to guests or friends to cleared file folders in your network storage, i.e. for sharing images or videos.

Figure 6-18 Guest access



1. Click on **Network storage**.
2. Click on **Guest access**.
3. Set the hook at **Activate guest access**, if you want to activate host access.
4. Click on the tab Browse, in order to choose the directory to which the guest can have access.
5. Set the hook at **read only**, if guest just should have reading rights in the additional folder.

Notice: If you just grant the guest reading rights, he can just read the files in the chosen directories, but he cannot change or erase them.

6. Once you have adapted the settings, confirm the changes by clicking the tab

. If you do not want to save changes, click on the tab

.

Notice: For registration as host enter the user name GUEST and create any personal password consisting of at least one sign.

6.4.5 Settings

Used work group

For recognition of the different networking devices within a home network, they are grouped together in workgroups. Windows list the recognized devices in the file explorer under network environment (or network). Via these entries the network storages (NAS) connected to your Speedport can also have access. The default setting in your Speedport is the work group **WORKGROUP**. Depending on the Windows Version different standard work groups will be in use.

Table 6-7 Workgroup

Operation System	**Name of work group**
Windows XP Home Edition	WORKGROUP
Windows XP Professional	WORKGROUP
Windows Vista	WORKGROUP
Windows 7	WORKGROUP
Windows 8	WORKGROUP

If the same work group name is set, the access to the network storage is facilitated. You can modify the work group name either in the Speedport or in the respective networking device. If the work group name does not match, you can also, via direct path entry, to access the network storage.

1. Click on **Network storage**.
2. Click on **Settings**.
3. Enter the respective work group name in the entry field.

4. Once you have adapted the settings, confirm the changes by clicking the tab

. If you do not want to save changes, click on the tab

.

Media playback

By media playback you label the folders on the attached data carriers as media folders. Media folders contain music, photos or videos.
The indication of the media folder contains the file formats MP3, M4A (w/o DRM), WMA (w/o DRM), WMV (w/o DRM), JPG, PNG, AVI, DivX, Xvid and MPEG2.

Notice: Depending on the size/speed of the used storage, it may take some time for the used storage to be identified.

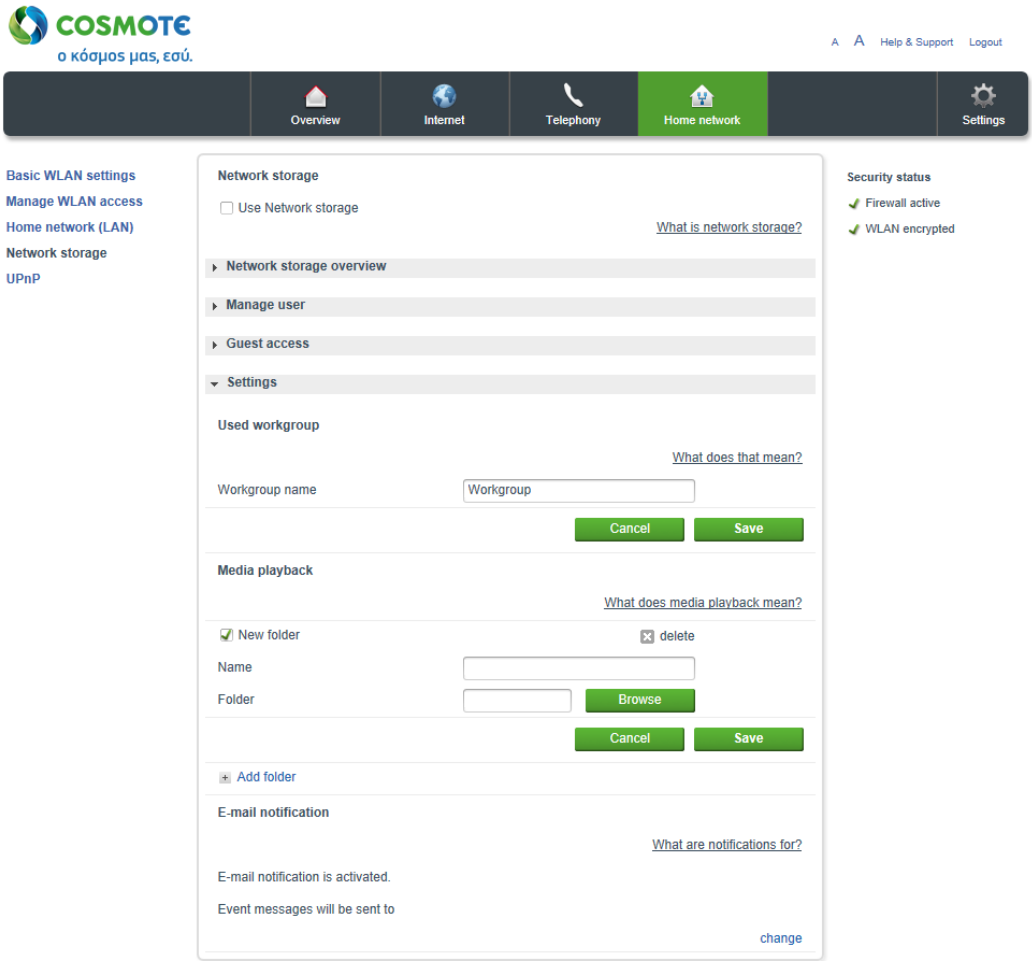
The content of media folders can be recognized by the appropriate playback devices in your home network automatically, as long as these devices provide the standards DLNA or UPnP AV and support the respective file formats.

Notice: If a file format in an media folder is not supported by the playback device, the respective file cannot be played back.

The media server is active, as soon as one directory has been cleared.

Notice: If you clear directories for media playback, all participants in the home network can display the media files. An access control does not exist then for these files.

Figure 6-19 Settings



1. Click on **Network storage**.
2. Click on **Settings**.
3. Click on **Add folder**.
4. Enter the media server directory in the entry field 

.
5. Click on the tab 

, to assign a directory to the media server.
6. Once you have adapted the settings, confirm the changes by clicking the tab 

. If you do not want to save changes, click on the tab 

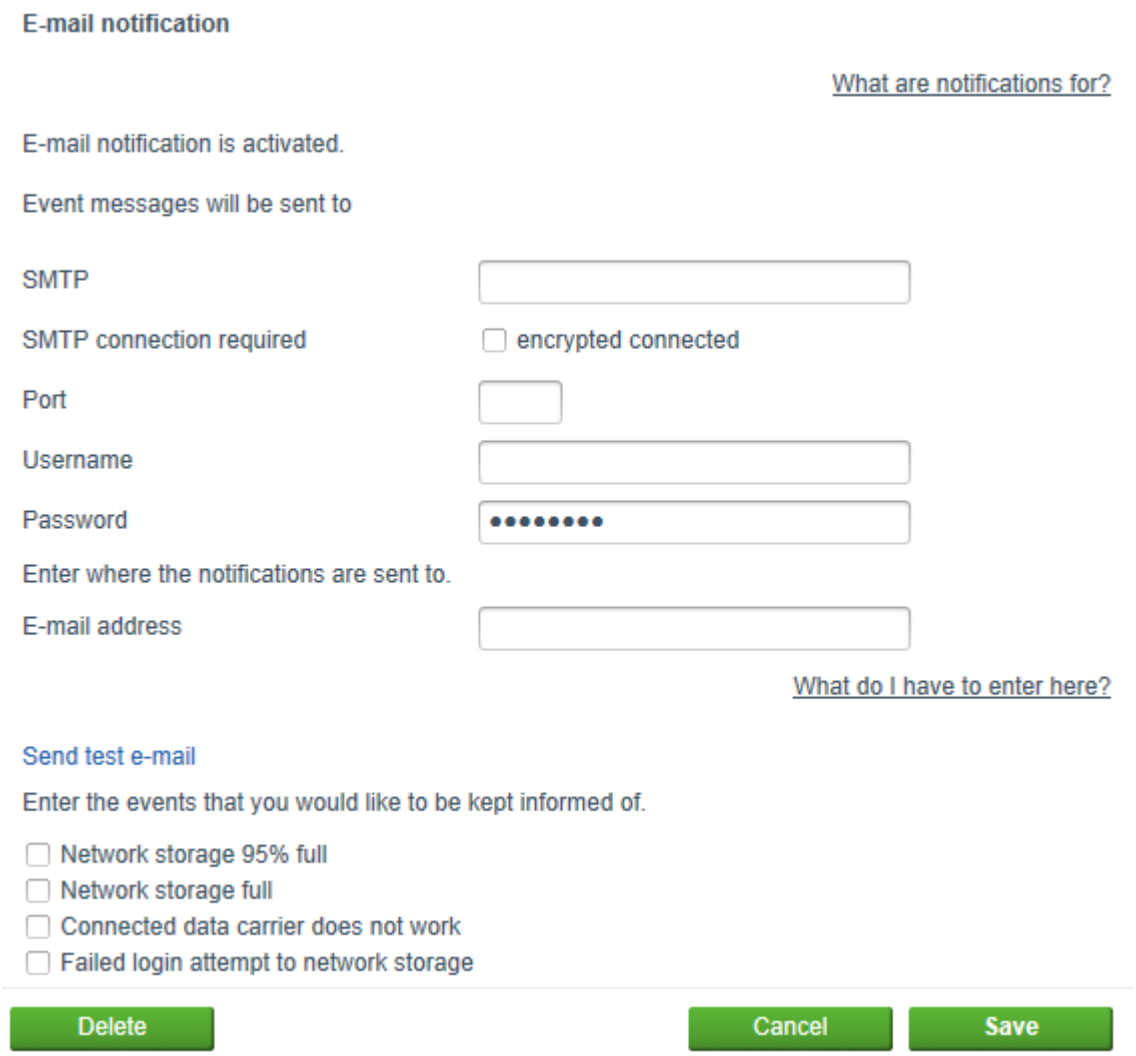
.

Suggestion: When you want to edit the created media server directory order, click behind the respective directory. If you want to create further media server directory, click on the statement 'New folder'.

E-Mail messages

Your Speedport can regularly update you about important incidences in your network storage via E-mail (i.e. critical storage status, data backup and folder synchronization events).

Figure 6-20 E-mail notification



1. Click on **Settings**.

2. Scroll to **E-mail messages**.

3. Click change, if you want E-mail messages reactivated again.

4.EntertheSMTP serveraddressintheentryfield


.

5. Enter your user name (E-mail address) in the entry field 

.

6. Enter your personal password into the entry field 
.

Notice: Please enter the personal password, which has been created for you or you have customized for your e-mail account. If you don't acquire yet a valid e-mail account, you cannot use this function of your Speedport.

7. Enter the E-mail address, to which messages are to be sent in the entry field

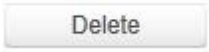
.

8. Set the **hook** with the events, about which you want to be informed.
9. Click on the statement **Send test e-mail**, in order to test settings.
10. Once you have adapted the settings, confirm the changes by clicking the tab

. If you do not want to save changes, click on the tab

.

Suggestion: If you want to deactivate the E-mail messages, click on the tab



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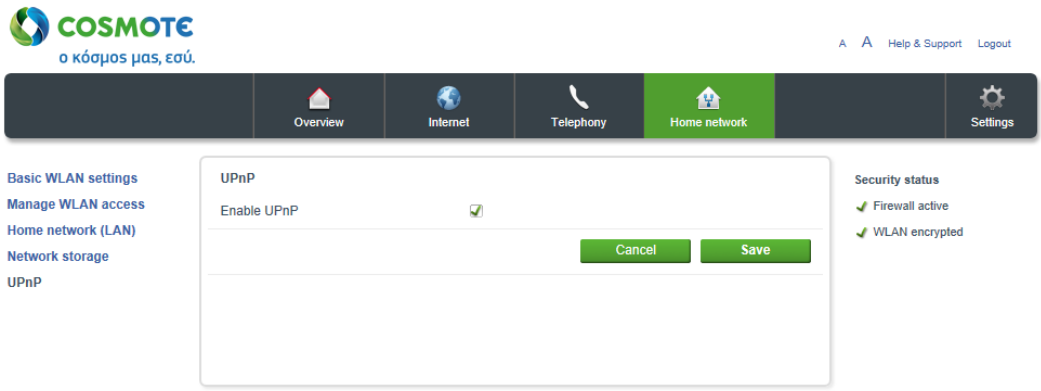
6.5 UPnP

You can configure UPnP so that the device can dynamically add to a network to obtain an IP address, announce its functions, and know the functions of other devices.

Figure 6-21 UPnP



1. Click on **UPnP (by default Disabled)**
2. Configure the following parameters:

Table 6-8 UPnP Parameters

Parameter	Description
Enable UPnP	Select the check box to enable the UPnP function.

3. Set the hook at **Enable UPnP**.
4. When you have adapted your settings, confirm the changes by clicking the tab Save. If you do not want to save your changes click on the tab Cancel.

Chapter 7 Telephony

~~The telephony service is not available.~~

Speedport Plus supports internet telephony with up to 2 analogue telephones.

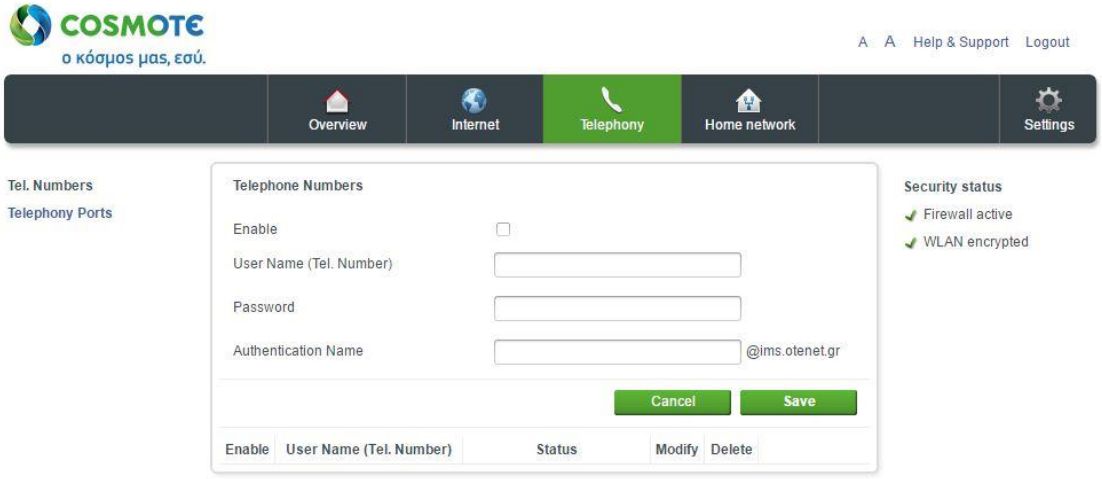
Notice: Please note, that Telephony is available only with Internet connectivity.

Notice: In case of power failure telephony is not supported.

7.1 Tel. Numbers

Configure Telephone numbers.

Figure 7-2 Tel Numbers



1. Click on **Tel. Numbers**.
2. Configure the following parameters:

Parameter	Description
Enable	Tick the enable option in order for the telephony to be functional.
User Name	Insert the 10 digit telephone number (SIP account) provided by the operator, in the form of +30xxxxxxxxx
Password	Insert the SIP account password provided by the operator
Authentication Name	Insert the 10 digit telephone number (SIP account) provided by the operator, in the form of +30xxxxxxxxx

39. When you have finished configuring your settings, confirm the changes by clicking on. ?????

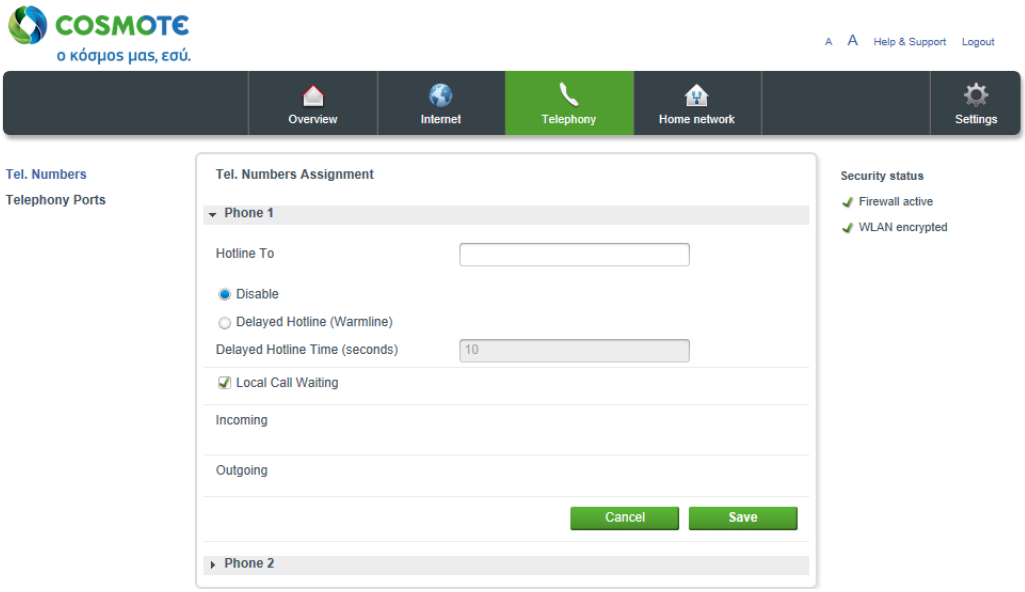
If you do not want to save your changes click on ?????

.

7. 2 Telephony Ports

Assign the sip accounts to the telephony ports and configure specific phone port settings.

Figure 7-3 Telephony Ports



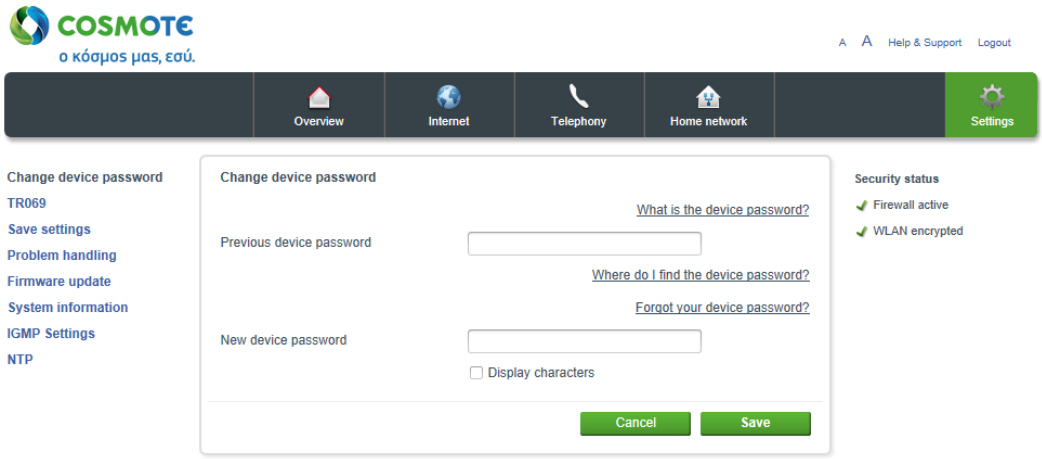
1. Click on **Telephony Ports**.
2. Expand the menu **Phone 1/2**.
3. Enter the number to be dialed if hotline is enabled.
4. Enable the desired hotline service
5. If warm hotline is selected, enter the number of seconds to wait.
6. Enable/Disable Call Waiting. This setting is per telephony port.
7. Enable/Disable Do Not Disturb (DND) for the selected Phone port.
8. Enable/Disable the Call Waiting for the selected phone port.
9. Configure which sip accounts are assigned for incoming calls.
10. Configure which sip account is assigsned for outgoing calls.
11. When you have finished configuring your settings, confirm the changes by clicking on Save. If you do not want to save your changes click on Cancel.

Chapter 8 Settings

8.1 Change device password

Access to the configuration menu is protected by a device password. The assigned device password of the default settings can be found on the label on the backside of your Speedport.

Figure 8-1 Change device password



1. Click on **Change device password**.
2. Configure the following parameters:

Table 8-1 Password Parameters

Parameter	Description
Previous device password	The default is as follows: User: <label on the bottom of Speedport>
New device password	User self-defined password.
Display Character	The characters will be displayed in the password field if this is enabled.

3. Enter your current device password in the entry field .

4. Enter your own personal device password in the entry field

.

Notice: The personal password consists of 8 to 12 permitted characters (uppercase letters, lowercase letters, numbers and special characters) and more than one type of characters must be included.

5. Once you have adapted the settings, confirm the changes by clicking the tab

. If you do not want to save changes, click on the tab

.

Forgot device password

If you have forgotten your personal device password and cannot access anymore the user interface of your Speedport, you have to reset your Speedport to delivery status.

1. Push for at least five seconds with a thin item in the opening on the backside of your Speedport (labeled with **Reset**).

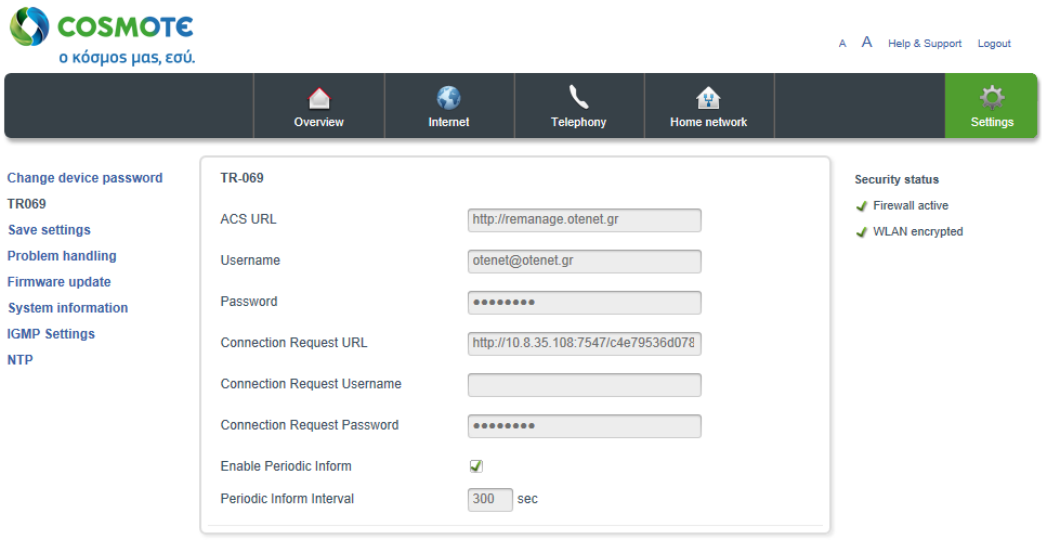
Notice: All previous user-configured settings will be lost!

2. Now use the preset device password on the **type label** printed on the bottom of your Speedport to log in again.

8.2 TR069

In this menu the TR069 Remote Server parameters are displayed.

Figure 8-2 TR069



1. Click on **TR069**.
2. The following parameters are displayed:

Table 8-2 TR069 Parameters

Parameter	Description
ACS URL	Preconfigured ACS URL
Username/Password	User name and password for the Remote Management server to access the device.
Connection Request URL	It is generated automatically.
Connection Request Username/Password	User name and password for ACS server to access the device.
Enable Periodic Inform	To enable periodic inform.

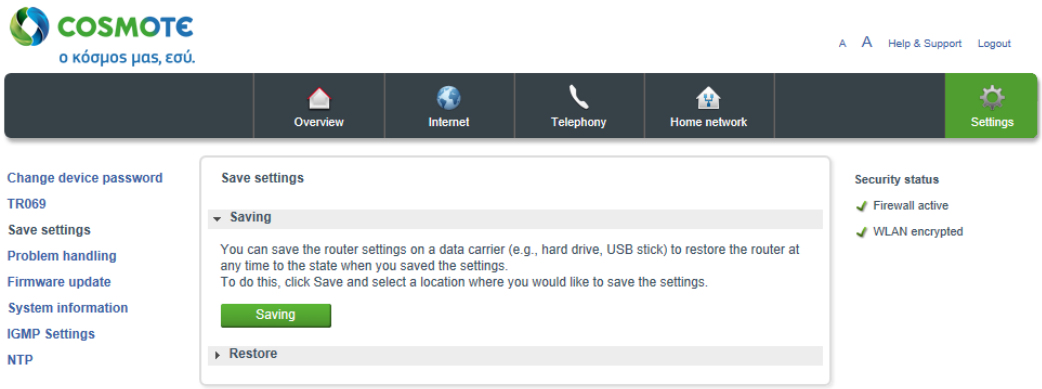
8.4 Save Setting

Once you have configured your Speedport according to your needs, it makes sense to secure this configuration. If all these settings are accidently lost or erased, you can always retrieve this backup. You can load your backup into the Speedport, if extensive configuration changes have resulted in unexpected malfunctioning of your Speedport. If you do not have a valid backup, you can reset your Speedport to delivery status. In this case, all configuration settings, as well as personally set passwords are lost. The preset password, the device password printed on the label on the backside of your Speedport, has to be used again.

8.4.1 Backup settings

You can backup the settings of your Speedport on a data carrier (i.e. hard drive, USB stick), inn order to always be able to update your Speedport to the status of the last backup.

Figure 8-4 Saving

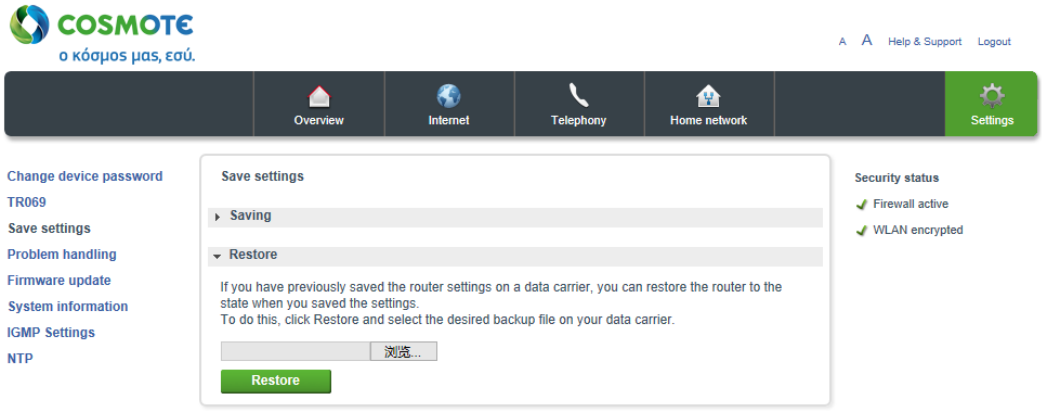


1. Click on **Save settings**.
2. Click on **Saving**.
3. Click on the tab Saving.
4. Confirm the inquiry of your internet browser by clicking the tab Save and choose the location of storage.

8.4.2 Restore settings

If you have backed up the settings of your Speedport on a data carrier before, you can always update your Speedport to the status of the last data backup.

Figure 8-5 Restore



1. Click on **Save settings**.
2. Click on **Restore**.
3. Click on Browse .
4. Choose the storage location where the backup exists.
5. Click on Restore .

Notice: After successfully restoring your settings your Speedport will be restarted automatically. During this procedure your Speedport displays a message. After 180 seconds you can end this procedure by clicking the tab ‘OK’.

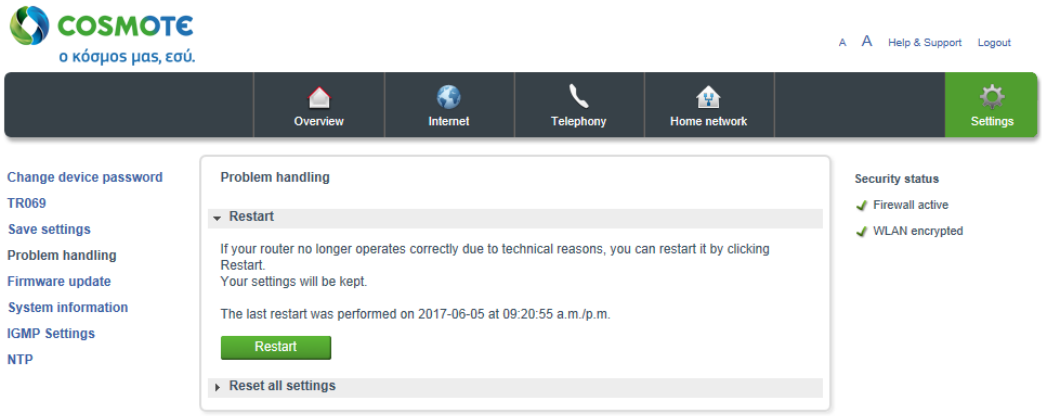
8.5 Problem handling

If you encounter problems restart your Speedport or reset it to delivery status.

8.5.1 Restart Speedport

If your Speedport does not function properly anymore due to technical reasons, you can restart it. Your settings will be kept then.

Figure 8-6 Restart



1. Click on **Problem Handling**.
2. Click on the statement **Restart**.
3. Click on the tab Restart .

Notice: Your Speedport will be restarted now. You cannot carry out settings during that time. After that you can recall the configuration program. The restart is finished after 70 seconds.

8.5.2 Reset all settings.

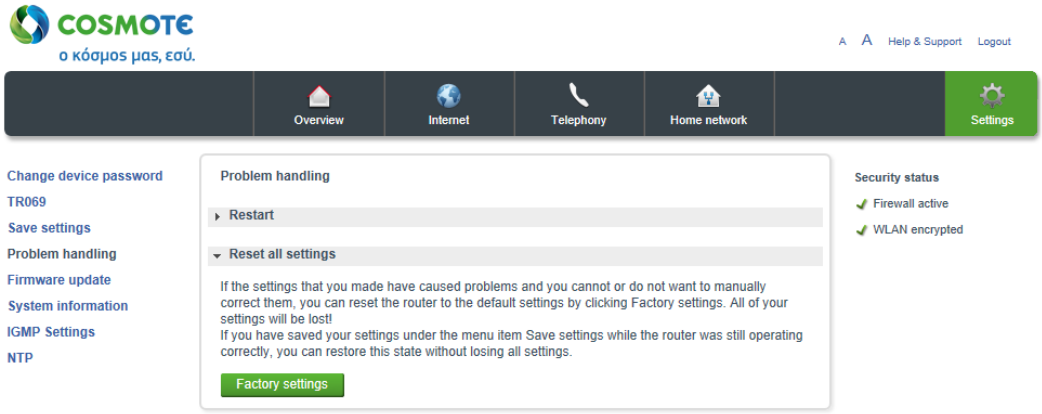
The settings carried out by you have caused irregularities and you cannot correct these manually. In this case you can reset the Speedport to delivery status and

reconfigure it manually, to restore backed up settings. Under some circumstances you can conveniently reset your Speedport automatically and let it be reconfigured by the Telekom.

Reset all settings and reconfigure Speedport manually.

If you have backed up your settings at the moment, when your Speedport still functioned regularly as described under the menu **Settings backup**, you can easily restore this status, without loosing all settings.

Figure 8-7 Reset all settings



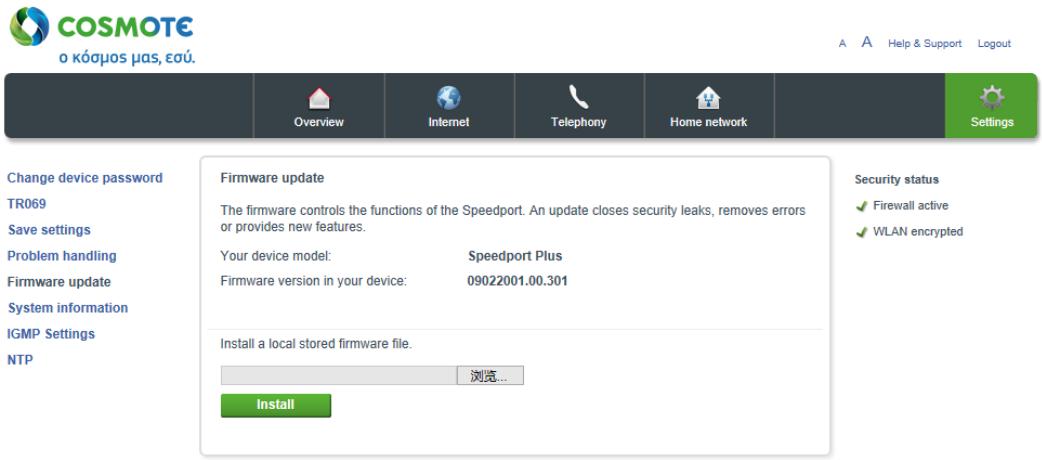
1. Click on **Problem handling.**
2. Click on **Reset all settings**.
3. Confirm the security inquiry by clicking the tab Factory settings. Your Speedport will be restarted automatically.

8.6 Firmware update

The firmware is the operating system of your Speedport. Inside the firmware, the whole functionality of your Seedport is saved. You have purchased a 100% developed and tested product. Yet it might be that the firmware has to be updated to a new version.

Never separate your Speedport form the power source and from the broadband during firmware update. This may cause a loss of data, which results in malfunctioning of the Speedport.

Figure 8-8 Firmware update



1. Click on **Firmware update**.

2. Click on the tab Browse and choose the storage location for the update.

3. Click on the tab Install . The router will be restarted automatically after installation.

8.7 System Information

Described in chapter 4.

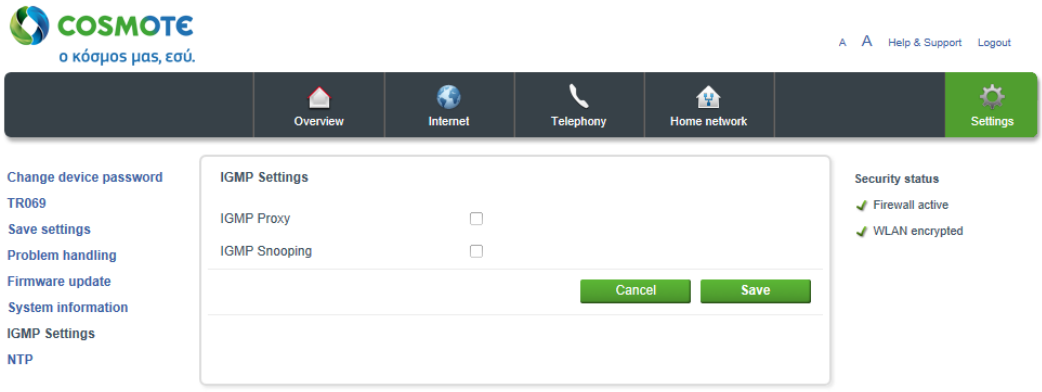
8.8 IGMP Settings

Configure the settings for multicast protocol.

IGMP Snooping feature allows a network switch to listen in on the IGMP conversation between hosts and routers.

As for IGMP Proxy, it can be used to implement multicast routing.

Figure 8-9 WAN Connection for IGMP Proxy

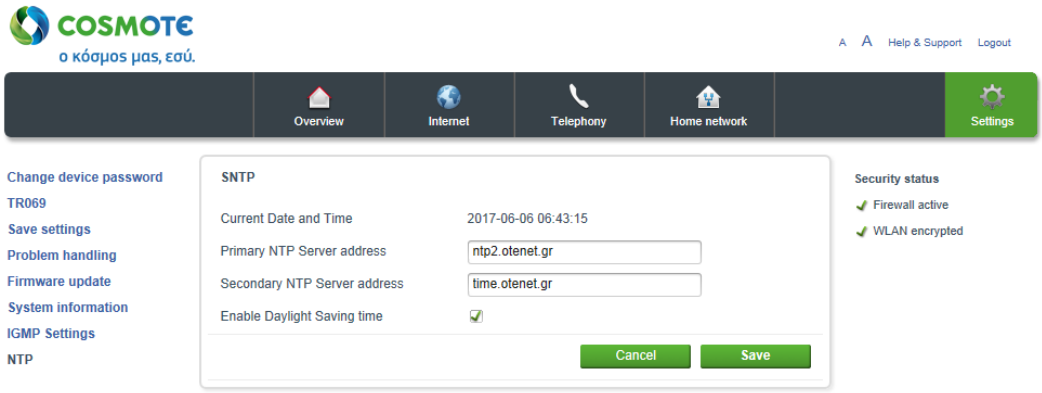


1. Click on **IGMP Settings**.
2. The hook at **IGMP Proxy** and **Snooping** should be unchecked.
3. If you decide to modify the settings (not recommended), confirm changes by clicking the tab Save. If you do not want to save changes, click on the tab Cancel.

8.9 NTP

Configure the settings for Network Time Server. The device will contact a Network Time Server at regular intervals and update its internal timer.

Figure 8-10 NTP



1. Click on **NTP**.
2. Enter your primary NTP server address in the entry field (preconfigured)

.

3. Enter your secondary NTP server address in the entry field (preconfigured)

.

4. Set the hook at **Enable Daylight Saving time**, if your location is currently using Daylight Saving.
5. Once you have modified the settings, confirm the changes by clicking the tab

. If you do not want to save changes, click on the tab

.

Reset to delivery status (Reset)

Your device contains private data, which could harm, once they get public. These data may be plug recognition supplied by your provider and your personal password. With these data strangers can surf the internet, check E-mails and carry out other security sensitive processes at your expenses. That is why you have to carry out a reset before you give your device for example for reparation or maintenance to third parties.

The reset to delivery status is also necessary, if you have forgotten your personal password and you have no more access to the configuration program. In this case you have to completely reconfigure your device as follows:

1. Your Speedport has to be connected to the power source.
2. Use a thin pointed object to press for at least five seconds into the opening on the backside of your Speedport labeled with **Reset**.
3. Wait 180 seconds, before disconnecting your Speedport from the power source.

Now all data are erased and replaced by the delivery status data. Now you can unhesitatingly hand over your Speedport to someone else.
If you want to check, whether all data are erased, try out if the password has been reset to default settings (Device password on the type label on the backside of your Speedport). If the password has been reset, all other data have been erased as well.

Notice: Please note that after a reset to the delivery status the WLAN name (SSID) and the WLAN key are reset to the default settings. These are the data, which are entered on the type label on the backside of your Speedport or in the included WLAN device passport. If you give your Speedport to others, this information is accessible as well for other.

Troubleshooting

Within the user interface of the Speedport you can find more information for troubleshooting. Click with the mouse on the respective entry fields or the highlighted texts.
If your Speedport does not seem to work properly, please try to solve the problem first with the following troubleshooting table.

General problems or problems with the local net.

Table A-1 General problems

Problem	**Reason**	**Solution**
No illuminated display glows on the front side of the Speedport.	The power source to the Speedport is disconnected.	Check the used plug. Use a device fro that of which you are sure, that it functions.
After a firmware update the device malfunctions.	During a firmware update the connections to the Speedport were interrupted.	Reset your Speedport to delivery status. If that does not solve the problem, please contact the technical support of the OTE S.A.
A wireless connection to the home network by the Speedport cannot be established.	The WLAN function on the Speedport is deactivated.	Activate the WLAN function on the Speedport by pressing the key **WLAN**.
	The encryption on the Speed port does not correspond to the encryption on the end devices.	Set the same encryption on the Speedport and at the end devices.

Problems with dialing

Table A-2 Dialing problems

Problem	**Reason**	**Solution**
You cannot do calls via internet telephony even though your connection	Your Speedport has no internet connection and cannot sign in for calling.	Check if the display **Telephony** is illuminated. Check the connection of your Speedport.

has been successful.		Be sure that in the menu for internet connection the option **always online** is activated.
Calls in the local telephone circuit always get the message **Number does not exist.**	No local was used.	Always use for local calls the respective telephone code or enter the code for the configuration.

Call the configuration program

Table A-3 Configuration

Problem	**Reason**	**Solution**
The page could not be found.	You have entered the wrong IP address.	Check the IP address.
The configuration program is not accessible anymore.		Reset to delivery status.

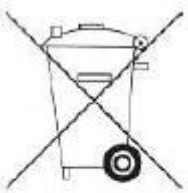
If the problem still remains, our technical support can help you. If you suspect an interference of your connection, please contact the customer support of OTE.

Technical Service

Counsel and assistance for configuration of your Speedport are available at the customer service of the technical support of OTE.
An experienced personnel is available during our office hours or under the customer service **13888**.
Please have the serial number of your device ready. You will find it on the type label on the backside of your Speedport.

Suggestion: Your device contains private data, which can harm you, if they become public. That is why if you have your Speedport repaired, carry out the Reset to factory defaults (delivery) status. Please note that the preset encryption of your Speedport is reactivated then.

Disposal of old devices



Once your Speedport is disused, bring the old device to a collecting point of your local public waste authorities (i.e. junk dealer). The symbol on the left indicates that the device is to be disposed of separately from the household trash. According to the laws of disposal for electrical and electronic equipment owners of old devices are obliged to have old electrical and electronical devices disposed of in separated waste. Please help and contribute to the environmental protection by not disposing of the old device in the household trash.

Note for the recycler: The date of production or bringing into circulation is stated on the type label in accordance with DIN EN 60062, No. 5.

Your device contains secret data, which could harm you if they become public. So if you for example want to have your device repaired reset it back to delivery status. Please note that the preset encryption of the data is active again then.

The Speedport Plus equipment is available exclusively in Greece.

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