

Internet via Satellite - Description

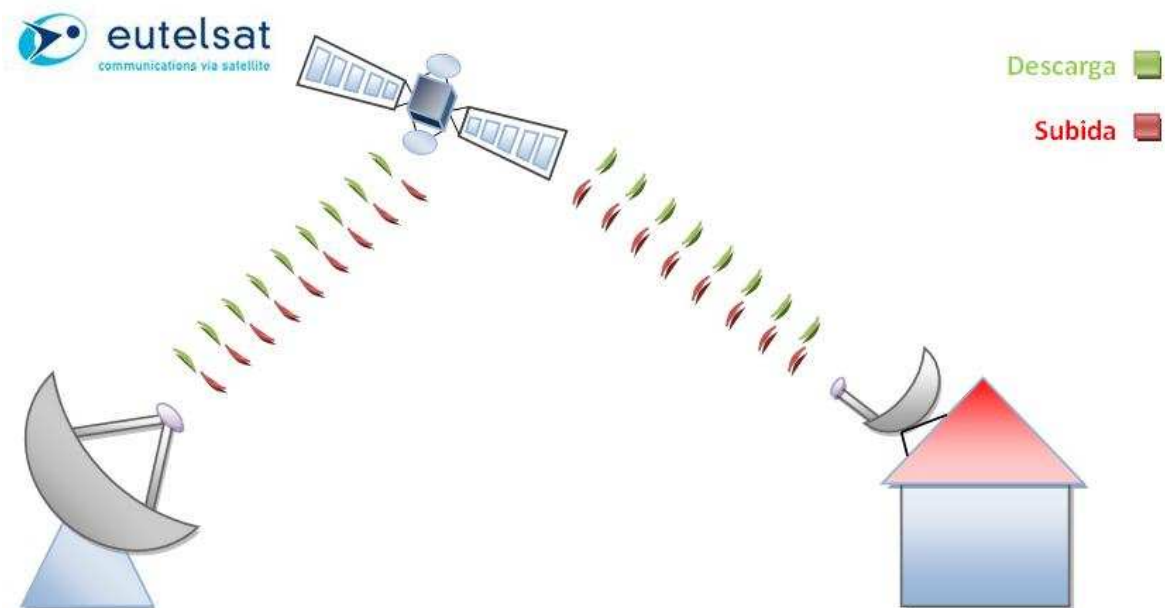
Since we are living in a broadband-time, there are still many areas where there is no regular broadband connection (DSL) available. As a pioneer on the sector of the satellite communication services we are presenting you with our "Internet via Satellite" products a suggestive alternative to the regular DSL.

With our "Internet via Satellite" products we are only referring to a 2-way Satellite communication service. This means that the satellite can send and receive data, there for you do not need an additional fixed line or internet connection. The only thing you will need is satellite equipment which includes a receiving and sending KA-Band outdoor unit (the dish size is 67cm) and a satellite modem from the company ViaSat.



For the transmission of data we are mainly using the satellites Eurobird 3 for our sat_speed+ system, which you are using Hot Bird 6 in Spain. The data transmission is being made in the KA-Band, which is the future data and multimedia transmission with the highest capacities.

With the sat_speed+ products we are using a technique provided from our side. We have developed a platform which is located in the uplink center at a subsidiary of the satellite company Eutelsat located in Torino.



Voice over IP

Making phone calls through the internet (Voice over IP, short VoIP) is no longer a temporary fashion, now a days has been established a solid communication service.

VoIP is offering a large number of capabilities that are very hard to implement to a regular telephone line. For example you can take your VoIP phone on vacation, there you can visit an Internet cafe or use the internet connection in your hotel were you can be reached under your standard phone number. Companies with different locations can be connected with each other and so can make phone calls without any additional costs. You don't even have to get rid of your existing ISDN-Phones, because VoIP can be implemented. The possibility depends only on your fantasy.



Do not hesitate to contact us for your individual Voice over IP solution.

Satcall VoIP – Details

The satcall VoIP product is a free internet-telephone service which provides you phone calls without a regular telephone connection. The only thing you will need is an Internet connection (what for example our Internet via Satellite products can provide you) and a so called SIP-Client.

Terms of reference *(optional)*:

- * 01803-Phone number for free 1)
- * Flatrate into the landline of the EU 2) for a monthly fee of 9, 95 EUR
- * fixed local network number from Spain 3) for an onetime fee of 19, 90 EUR

Plus: 7, 40 € / month – for keeping your local phone number.

1) The requirements are a singular order of a Flatrate into the landline of the EU.

2) Only for private use. Contract duration is one month.

3) Verification of a valid residence in Spain is needed.

How does the FUP (fair use policy) work on the sat_speed+ products?

The system constantly calculates for every sat_speed+ user a possible average on data performance (Data volume) for a certain timeline (hour, four hour, daily, weekly, four weekly). This average is the so called threshold.

As far as users are over the threshold there bandwidth will be throttled, so that for this user there is less speed available. For the case that this customer continues to stay over the average, the bandwidth will be throttled even harder. A complete lock of the system will never happen, so that even in very hard cases of throttle there is still possible to access the internet.

There are five time timelines (see top) with five different thresholds. The thresholds are focusing on the current tariffs. We have the tariff sat2000 with the following options FUP2000, FUP3000, FUP5000 and FUP10000.

As average data transfer rate you can calculate in sat2000 - FUP3000 around 53 MByte, on sat2000 - FUP5000 around 80 MByte and sat2000 - FUP10000 around 159 MByte without being throttled in the maximum bandwidth.

ATTENTION! The threshold is not the actual average on data performance. The threshold calculate from $0,5 * \text{download} + 1,5 * \text{upload}$. When a user download 145 MByte and upload 5 MByte per hour, the threshold will be 80 MByte ($0,5 * 145 \text{ MByte} + 1,5 * 5 \text{ MByte}$).

This does not mean that you can download 580 MByte and upload 20 MByte e. g. with sat2000 - FUP5000 within four hours without any restriction on maximum bandwidth, because this will be the threshold in the amount of 320 MByte ($0,5 * 580 \text{ MByte} + 1,5 * 20 \text{ MByte}$) and the basis would be the threshold of the next timeline (four hour).

The suspension of the throttle works in real time. Should there for a user be throttled by the system, the traffic builds down continuously and not by the full hour.

In addition:

Over 95% of our clients have never run into the FUP.