

FAQ about the end of ISDN

Everything you need to know about the end of ISDN and the upgrading of the network towards IP

1. Why is Proximus upgrading its network?

- Proximus is continuously improving, optimizing and upgrading its network. From 2016, we will update and migrate various services on our IP network by deploying optical fiber, migrating ADSL customers to faster VDSL and VDSL2 technologies, and gradually phasing out older technologies.
- These initiatives tie in with our "Move to all IP" transformation project, which has three pillars:
 - 1) **Customer satisfaction**: our priority is to deliver the best quality network to our customers, for both fixed and mobile connectivity and for data and voice.
 - 2) **Market evolution**: IT applications are evolving. Every year, the amount of data transported on the networks is increasing at an exponential rate. At the same time, the number of devices, sensors, and connected objects continues to increase rapidly. It is therefore vital to ensure that the network can adapt to future changes.
 - 3) **Evolution of technology providers**: global manufacturers of network components and communication equipment (e.g. telephone exchanges) are evolving towards IP technology, gradually phasing out analog and digital connectivity equipment. It is therefore a global trend.

2. Which ISDN lines will be discontinued?

Only ISDN2 technology (ISDN-2 standard, Indialing, Cascade, TWIN, and Duo) will be affected. ISDN30 technology on PRA (Prime Rate Access) will not be affected.

3. Which type of line and equipment will replace the ISDN offer?

A revamped IP offer which allows you to easily connect your telephone exchange (whether it is an IP model or not) using a converter box: discover our offer on our website.

4. What is the difference between ISDN, IP, optical fiber, Voice over IP (VoIP), ISDN (oIP), etc.?

- IP is a mode of communication via Internet (Internet Protocol) which transmits data.
- Voice over IP (VoIP) is a voice communication mode (telephone conversation) which uses these IP lines.
- ISDN is the traditional digital line mainly used for telephone exchanges, old modems and/or digital phones.
- ISDN oIP is a version of ISDN adapted to the evolution of the Proximus network towards IP. This solution allows us to make the existing ISDN line compatible with IP modes of communication. The sale of ISDN oIP will also be discontinued on 1/1/2017.
- Optical fiber is an optical network that uses light to transmit data. It is the latest technological evolution which allows users to reach unparalleled transfer speeds compared to other technologies.

5. Does Proximus plan to stop the technical service for the ISDN2 voice access (basic access) and to oblige customers who currently use ISDN2 to migrate to Voice over IP (VoIP) technology on 1/1/2017?

No. From 1 January 2017, the **technical service** for customers with ISDN and ISDNtoIP lines will continue to be provided.

Nevertheless, to anticipate any future changes (new telephone exchange contract, extension, etc.), we will already migrate your ISDN and IP line(s). This will give you an opportunity to think about replacing your telephone exchange with IP or Cloud technology. These new technologies will ensure that your activities remain future-proof and will become more and more standard. Proximus will help you to choose the best option based on your company's needs.

6. What are the real advantages of Voice over IP (VoIP) compared with the traditional telephony and ISDN technologies?

- **Next-generation offers**

- Advantageous, next-generation voice-exchange rate plans (unlimited plans, infrastructure in the cloud)
- IP also opens the door to HD Voice over IP, for excellent sound quality. It will require compatible fixed HD telephones.
- Rich media communications: check the presence of your contacts (online, offline, busy, etc.), instant messaging, video calls, image transfer, social networks, voicemail features via e-mail, click-to-call service on a website, voice call button in an e-mail, etc.

- **Guaranteed Quality of Service**

With Proximus' Voice over IP solutions, your voice traffic does not go over the public Internet network, but remains on the Proximus network which is configured in a specific way to offer guarantees in terms of quality of service for VoIP, regardless of the bandwidth and type of connectivity. Voice traffic always has priority and is therefore never disrupted, unlike what often happens with the Voice over IP solutions offered on the public Internet network (e.g. Skype).

- **Network uniformity (convergence)**

All voice and data traffic in a single, integrated, physical network avoids having to use separate internal networks. Apart from an initial installation cost, the management of a single network can allow you to make considerable savings. Similarly, the network administrator can devote all his or her time on a single network. You no longer need several teams to manage a data network and another to manage a voice network.

- **Number portability within the company**

The traditional telephone system assigns a telephone number to a specific device. Thanks to Voice over IP, the mobility of numbers is now guaranteed: a telephone can use the same number everywhere within the company, provided it has the required IP connectivity. This feature is also available on a PC (softphones or phone on a PC) and via apps.

IP compatibility with devices, telephone exchanges, and numbers

7. I currently have ISDN2 lines (basic access) and an ISDN telephone exchange from Proximus. What will happen to my current ISDN lines and my exchange? What do I need to do?

- Nothing will change for current ISDN lines. Proximus will continue to provide technical service and maintenance for the ISDN lines and telephone exchanges for several years to come. So you don't need to adapt your on-site infrastructure immediately.
- However, to anticipate any future changes (new telephone exchange contract, extension, etc.), we advise you to migrate your infrastructure now and switch to an IP line and telephone exchange. These new technologies will ensure that your activities remain future-proof and will become more and more standard. Proximus will help you to choose the best option, based on your company's needs.

8. I have ISDN telephone numbers. Will I lose these numbers after 1 January 2017?

- Nothing will change. Your customers, suppliers, business partners, etc. will still be able to reach your company at the same numbers. You will keep your current individual ISDN numbers and DDI numbers.

9. I have an ISDN telephone exchange from Proximus. Is it compatible with VoIP? Can I extend the number of ISDN lines?

- Recent Proximus ISDN telephone exchanges are hybrid and compatible with both ISDN and VoIP.
- If your telephone exchange contract will not expire for some time, and you need additional lines, Proximus will activate them as VoIP solutions on your ISDN telephone exchange.
- If the renewal date of your telephone exchange contract is approaching, Proximus will advise you to upgrade your infrastructure by switching to an IP telephone exchange. This new technology will ensure that your activities remain future-proof, and you will benefit from special discounts during the migration to a brand new IP telephone exchange.

10. I have an ISDN telephone exchange, but not from Proximus. Is it compatible with the VoIP services? Can I extend the number of ISDN lines?

- ISDN telephone exchanges are compatible with IP if you use an optional adapter, called the Bizz IP Box. Line extensions are thus perfectly possible.

11. I have an alarm, fax, payment terminal or other analog device. Is it compatible with VoIP?

- If you have a Proximus telephone exchange, you can connect your analog devices directly to the exchange.
- If you don't have a Proximus telephone exchange, you have to check if it has analog ports. If not, you need to add a Bizz IP box.
- If you don't have a telephone exchange, these devices can be directly connected to the bbox3v modem (2 ports possible).

For alarms, however, we recommend leaving the device on a separate line with a battery (Eaton Ellipse Eco) in case of a power cut.

12. Old analog telephones do not need a power supply. Does the same apply to Voice over IP telephones? What happens in case of a power cut?

- VoIP phones need to be connected to the electricity network.
- To keep your devices running, where the continuity of your voice or data connection is crucial (alarms, surveillance lines, service lines (lifts), etc.), we strongly recommend adding a battery (Eaton Ellipse Eco) to your modem. The battery guarantees the functioning of VoIP by providing 1 hour of electricity on a b-box modem, a Bizz IP Box, a Technicolor router for Office & Go Pro, and a fiber modem (OLT: Optical Line Termination).
- To keep your telephone exchange running, we recommend opting for a UPS (Uninterruptable Power Supply) battery.

13. What do I need to configure and install VoIP telephony?

Proximus will always help you to configure your Voice over IP settings in an optimal way. **As a general rule**, VoIP services are delivered on data connections (DSL on copper or optical fiber) with or without data services (Internet line), but always via a modem (supplied).

If you use a PABX or telephone exchange, we recommend you opt for an IP-compatible exchange. If the exchange is not directly compatible or if you use an old ISDN telephone exchange, Proximus will propose the use of an IP adapter (Bizz IP Box).

14. What should I do if I currently only have an ADSL connection and want to subscribe to the VoIP services?

On ADSL, you can install up to four voice channels. If you need more capacity, we will check the availability of VDSL or optical fiber and carry out an upgrade if possible. In the exceptional case that VDSL or optical fiber is not available, Proximus will continue to serve its customers by implementing a traditional ISDN2 telephone service. Proximus will always help you configure your Voice over IP settings in an optimal way.

15. What if IP is not available in my region? What are the alternatives?

In the rare cases where you don't have access to DSL or optical fiber (<5 % of Belgian territory), Proximus will continue to implement an ISDN2 telephone service, even after January 2017.