The telecommunications sector has evolved considerably in recent years with a move to all IP and a bandwidth explosion. And traffic will continue to increase tenfold in the coming decade, with a progressive uptake of video, audio, cloud based services and with ever more companies requiring 10Gbps connections. Proximus invests heavily to support this evolution. Both in its access network –that connects your Home and Business to the nearest Proximus site– via the ongoing fiber network rollout, via mobile 5G.. And in its IP backbone network –that connects all Proximus sites and Service Platforms– via the TiTAN project described in this document.

The IP network carries almost all traffic for Voice, Data, TV and Mobile; both for Residential and Professional customers. The TITAN project will replace the current IP network in order to face the exponential traffic growth in years to come. This will happen between mid-2018 and 2021.

Layered IP and optical

The routers in the TiTAN IP network are interconnected via ultra-fast 100Gbps IP links.
Migration steps

On the left of the schematic below, are all customers who’s services access the IP backbone network via a big ‘access-side’ IP router in the local Proximus building. (There are commercial options to add redundancy versus that router.)

In the middle are the current IP backbone and the new TITAN IP backbone. Both networks are internally fully redundant.

On the right are the Service Platforms that deliver the services; these also connect to the IP backbone via fully redundant links.

The migration from current to new IP Network in very big lines:

1. **TITAN hardware replacement @ Proximus**
   - This step has the largest impact of the TITAN migration. All services are affected just 1 time by this step.
   - The ‘access-side’ IP router in the hundreds of Proximus sites will be replaced by much more powerful TITAN IP routers.
   - This happens spread over more than 100 intervention windows between August 2018 and 2021: either on Monday morning or on Wednesday morning, between 01:00 and 06:00.
   - All local IP based services² will be affected, starting at 01:00, and will be restored gradually over an estimated 2 hours 30 minutes.

2. **TITAN service rerouting @ Proximus**
   - There will be some short interruptions during subsequent steps.
   - The new IP router has to be reconnected from the current to the new IP backbone. This is done as a separate step to minimize the complexity (risk) of step 1. All local IP based services² will be affected for a few minutes.
   - The service platforms will be reconnected to the new IP backbone. Individual services may be affected for a few seconds.
   - Some service functions will be integrated in the new TITAN routers, thereby reducing the number and the size of possible failure points (more robust) and optimizing latency. Software upgrades of modem and set-top box will be triggered remotely.

² All local IP based services includes all services except some that use SDH, direct fiber links, etc. It also includes local mobile reception, although outdoor reception may remain available via more distant antennas. (Emergency 112 calls are always possible!)
Ready for tomorrow thanks to a fast modernized network

With the customer’s interest in mind, Proximus is conducting a vast program of modernization of infrastructures and services. The modernization of the backbone network is the logical follow-up to all simplification, modernization and capacity increase programs in wired (copper and optical) networks as well as in mobile networks.

**The Titan IP network is:**

- **More scalable thanks to the capacity of the equipment:** TITAN increases the access ports of 10 Gbps for Fiber for Belgium, Mobile Boost, ... These 10 Gbps access links are aggregated on ultra-fast 100Gbps IP links. All these Ultra High Speed IP links will be transported on our new optical network.

- **A key enabler for enhanced and new services in the future.**

The different types of data network solutions – private network Explore or public internet – with different value-added services and managed services as well as mobile solutions will be enhanced through this new platform.

It is therefore at the end of the race an additional guarantee for our customers / partners that their trust in Proximus is built on concrete parameters and benefits from a proactive and future-oriented management.

More info

Contact your account manager.