



Addendum to BROTSoLL

BROTSoLL NGLL Standard+

Date
Sensitivity

Approved by BIPT on 18/01/2022
Unrestricted

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1. Purpose of the addendum

The present addendum is communicated to the BIPT in order to comply with the articles 74, 75, 76 and 160 of “Besluit van de Raad van het BIPT van 20 september 2021 met betrekking tot de analyse van het BROTSoLL-referentieaanbod van Proximus voor hoogwaardige toegangsdiensten”.

The BIPT requests to offer the option to support two fiber accesses on 1 CPE in order to enable an OLO to connect an NGLL End-User site in a high availability 1+1 setup. The implementation of this addendum will be targeted within a reasonable timeframe in case a concrete request is received from an OLO. The offer is hereafter referred to as “NGLL Standard+”.

2. Dependencies with other addenda

There are no dependencies with other addenda.

3. Scope & planning

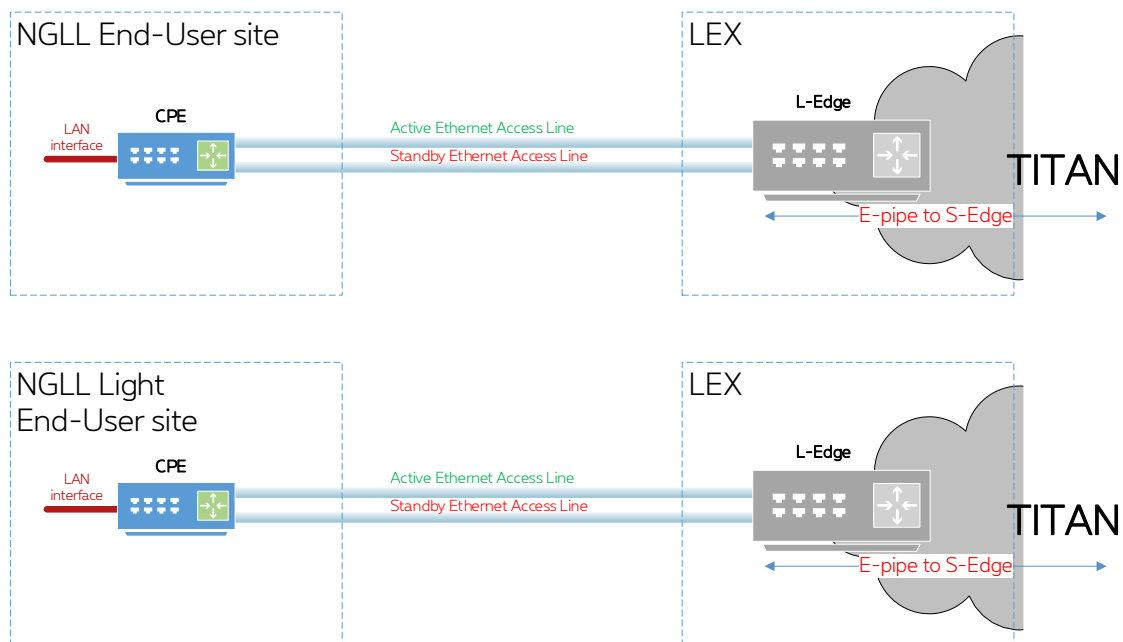
The present addendum is applicable to the BROTSoLL NGLL services as described in the BROTSoLL reference offer.

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4. Description

The NGLL Standard+ solution is a service consisting of a dual NGLL or NGLL Light fiber access between a single CPE on the End-User site and a TITAN L-Edge, in an Active/Standby set-up. On top of this physical setup a LAG will be configured between the CPE on the End-User site and the TITAN L-Edge to support an Active/Standby Layer 2 connection to the Proximus network. Under normal conditions the active Ethernet Access Line is in use. In case of service interruption on the active Ethernet Access Line, the standby Ethernet Access Line can take over the connectivity after a short service interruption (LAG convergence time).

The figures below present the Standard+ solution on NGLL and NGLL Light.



The NGLL Standard+ solution requires dual fiber SFPs in the CPE and L-Edge as well as dual NGLL or NGLL Light fiber access lines. Both NGLL or NGLL Light fiber access lines on an End-User site with an NGLL Standard+ solution have the same bandwidth profile. For the available NGLL and NGLL Light bandwidth profiles, reference is made to the “Main Body” of the BROTSOLL reference offer. Based on the current CPE portfolio limited options are available on the CPE LAN interface¹.

The protection as provided by the NGLL Standard+ solution has a positive effect on the uptime of the service. Failure of power, fiber cuts including both Ethernet Access lines, etc. can still lead to a service interruption of the NGLL/NGLL Light End-User site.

The SLA offered on the NGLL Standard+ solution enables Proximus to offer a yearly site availability of 99,95%².

5. Operational impacts

Upon a concrete request of an OLO the NGLL Standard+ solution will be developed within a reasonable timeframe. The service will then be developed on the end-to-end chain from Fiber P2P Quotation Tool until service delivery and a new CPE type will need to be introduced to support 3*10G interfaces.

¹ Note that today we can't support on NGLL a 1+1 configuration on 10G access, our current L2 CPE does not support 3*10Gbps ports.

² The availability of the site is based on the net service restoration time resulting from Severity 1 Trouble Tickets for incidents caused by Proximus. The calculation is done over 24 hours, from 1 January until 31 December, regardless of the actual intervention window applicable to the site.

6. Pricing

With the NGLL Standard+ solution as described in this addendum, a factor 1,5 will be applied on both rental and installation fees. More details on the pricing can be found in section 7 “Adaptation on BROTSoLL documents – Pricing NGLL Standard+” of this addendum.

7. Adaptation on BROTSoLL documents

Main Body

8.3 NGLL Standard+

NGLL and NGLL Light offer a 1+1 fiber protection option to End-User sites. Via this optional service a dual fiber access from 1 CPE on the End-User Site to the TITAN LEX is offered. This option enables a higher availability to the End-User Site and is referred to as “NGLL Standard+”⁶. Reference is made to Annex 5 “NGLL Technical Specifications” for a detailed description of the NGLL Standard+ solution.

14.3.3.2 Service Restoration Time and Annual Site Availability

In case of a Severity 1 Incident, Proximus guarantees to comply with the Service Reactivation Time specified in Table 19, and compensation can be claimed.

The applicable Target Service Level depends on the Site access technology and the topology which has been implemented for the Beneficiary. For NGLL Standard+ End-User sites and for OLO Aggregation Points with an MC-LAG configuration a different Target Service Level applies.

Should the service be unavailable due to force majeure (any problem falling outside the scope of Proximus’ responsibilities as beyond its reasonable control) or due to a problem caused by the Beneficiary (site cannot be accessed, contact person cannot be reached, service breakdown attributable to actions performed by the Beneficiary, application problems, etc.), the service reactivation time specified will be the target aimed for, but will not be binding.

⁶ The NGLL Standard+ solution will be developed within a reasonable timeframe in case a concrete request is received from an OLO.

Table 19: NGLL Target Service Levels for Service Restoration Time and Annual Site Availability

	End-User Sites OAP with standard configuration	End-User Sites with standard+ configuration	OAP with MC-LAG configuration
<i>Service Restoration Time – Severity 1 incident</i>	4 hours	4 hours	2 hours
<i>Service Restoration Time – Severity 1B incident</i>	Not applicable	Not applicable	4 hours
<i>Annual Site Availability</i>	99.90%	99.95%	99.99%

The Service Restoration Time and the Annual Site Availability are only applicable to tickets with Splicing Works not falling within the Public Domain Obligations (application of **article 192/2 of the RGIE/AREI¹²**).

In case of a Severity 1B Incident, Proximus guarantees to comply with the Service Reactivation Time specified in Table 19: NGLL Target Service Levels for Service Restoration Time and Annual Site Availability, without the possibility to claim compensation.

In case of a Severity 2 Incident, the service reactivation time will be the target specified in Table 19: NGLL Target Service Levels for Service Restoration Time and Annual Site Availability, without the possibility to claim compensation.

In case of a Severity 3 Incident, the target will be to resolve it within the best timeframe, at the latest on the following business day, without the possibility to claim compensation.

14.6.2 Availability

In case of failure to comply with the Annual Site Availability:

- For End-User Sites, the penalties are calculated as a percentage of the total annual fee payable for the NGLL connectivity solution on the Site concerned (Access Line & managed CPE). The percentages are listed in Table 21.
- For OLO Aggregation Points, the penalties are calculated as a percentage of the total monthly fee payable for all End-User Sites, connected to the concerned OLO Aggregation Point (Access Line & managed CPE). The percentages are listed in Table 21.
- The penalties may not exceed 5% of the annual fee for the NGLL connectivity solution (Access Line & managed CPE).
- Payment of the penalties can be claimed within three months as of the end of the year in question.

Table 21: Penalty scheme for NGLL Service Availability, expressed as a percentage of the Annual Connectivity Fee

<i>End-User Sites OAP with standard configuration</i>	End-User Sites with standard+ configuration	<i>OAP with MC-LAG configuration</i>
< 99.90% → 1,5%	< 99.95% → 1,5%	< 99.99% → 1,5%
< 99.70% → 5%	< 99.85% → 5%	< 99.97% → 5%

¹² RGIE=Règlement Général sur les Installations Electriques / AREI=Algemeen Reglement op de Elektrische Installaties.

Annex 4 NGLL Pricing

3. Pricing NGLL Standard+

4.1 Installation fee

The installation fee for the NGLL Standard+ service is due per End-User site on which this service is installed.

The mentioned installation fee is only valid if the infrastructure is available in the access network. If this is not the case, Proximus will make a specific offer taking the local situation into account.

NGLL (Light) Standard+ installation fee = 675,00€ (337,5€*)

* 3 or 6 years commitment.

For the elements covered by the one-time installation charge reference is made to chapter 1.2.1.

4.2 Rental fee

The Monthly Rental Charge of the Standard+ service is 1,5 times the Monthly Rental Charge of the NGLL or NGLL Light Service as mentioned in paragraphs 1.3.2.1 and 1.3.2.2.

For the elements covered by the rental fees reference is made to chapter 1.3.

All fees are due as from the day on which the BROTSoLL NGLL Line has been made available to the Beneficiary.

Quality of Service (QoS) and SLA are not included in the indicated prices.

4.3 CPE installation fee

CPE installation fee = 250,00€ (125,00€*)

*3 or 6 years commitment

4.4 CPE rental fee

The rental fee of the CPE is included in the NGLL rental fee as mentioned in paragraphs 3.1 and 3.2.

Annex 5 NGLL Technical Specifications

2.1.6.4 NGLL Standard+

The NGLL Standard+ solution¹ is a service consisting of a dual NGLL or NGLL Light (cfr. chapter 3 in this Annex for a description of the NGLL Light Service) fiber access between a single CPE on the End-User site and a TITAN L-Edge, in an Active/Standby set-up. On top of this physical setup a LAG will be configured between the CPE on the End-User site and the TITAN L-Edge to support an Active/Standby Layer 2 connection to the Proximus network. Under normal conditions the active Ethernet Access Line is in use. In case of service interruption on the active Ethernet Access Line, the standby Ethernet Access Line can take over the connectivity after a short service interruption (LAG convergence time).

The figures below present the Standard+ solution on NGLL and NGLL Light.

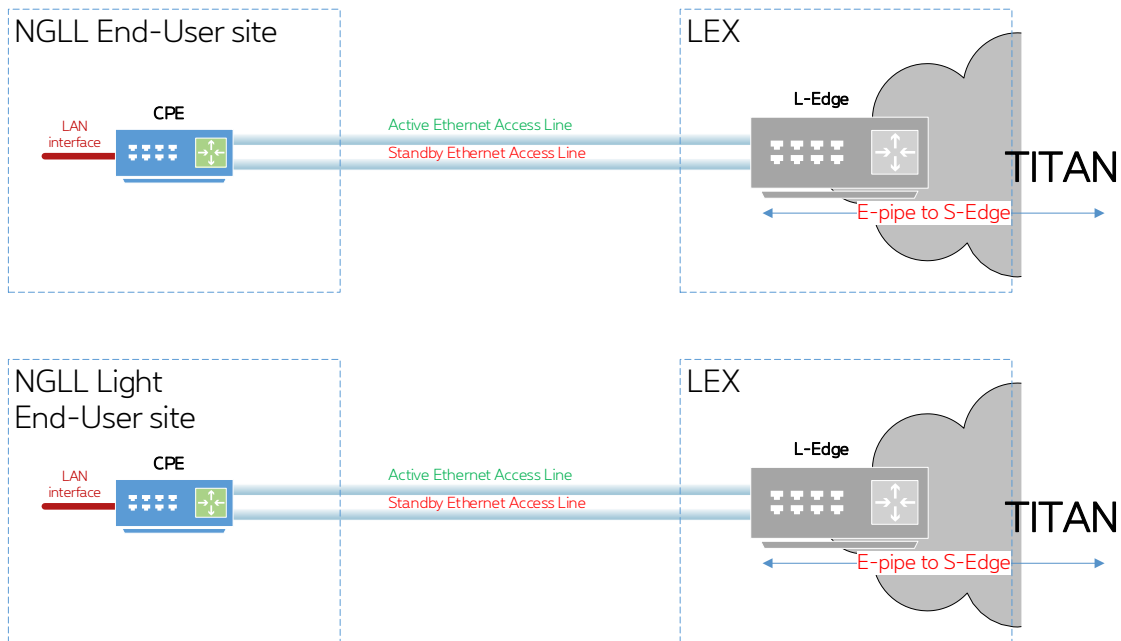


Figure 5: schematic of the NGLL Standard+ solution (with NGLL or NGLL Light)

The NGLL Standard+ solution requires dual fiber SFPs in the CPE and L-Edge as well as dual NGLL or NGLL Light fiber access lines. Both NGLL or NGLL Light fiber access lines on an End-User site with an NGLL Standard+ solution have the same bandwidth profile. For the available NGLL and NGLL Light

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