



## PROXIMUS REFERENCE INTERCONNECT OFFER

VoIP Interconnection offer

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# 1 Introduction

## 1.1 Scope of the VoIP reference Interconnection offer

The present VoIP reference Interconnect Offer (hereafter “Offer”) deals with the interconnect services Proximus offers to parties notified as Telecommunications Operator (hereafter “Operator” or “OLO”) in order to allow end-users connected to the public voice network of that Operator to communicate with end-users connected to Proximus’ fixed Network via the IP protocol.

A party notified as Telecommunications Operator means an Operator which fulfils all conditions required by the Regulatory Framework for electronic communication and which provides at least the activities for which the Operator is requesting the services included in the present Offer.

This offer is addressed to Operators having obtained numbering capacity from BIPT and having at least two Access Points available in Belgium.

The present Offer only deals with the introduction of voice interconnection between networks based on IPv6 protocol. The interconnection offer described in the BRIO dated 2006 (and its addenda) deals with interconnection based on TDM<sup>1</sup> technology.

The Interconnect Services included in this Offer encompass the following services, as defined and described below and under the technical conditions referred to in this document:

- Terminating Services for:
  - Calls to Proximus geographic numbers
  - Calls to Proximus Split Charging numbers
  - Calls to Emergency numbers
- VoIP Interconnect Transport Products
- On a commercial basis Proximus offers other interconnect services such as transit services or collecting services for instance. These services are not described in this Offer.

<sup>1</sup> Time Division Multiplexing

## 1.2 Limits of the VoIP Reference Interconnection offer

The conditions for Interconnection contained in the present Offer are applicable as from the date mentioned on the first page (for the prices reference is made to the Pricing annex which is part of the present Offer). Modifications can be made to these prices or conditions subject to the conditions set out in the applicable regulatory framework if any. Such modifications will be included in this Offer through the publication of a new version of this Offer or by means of an addendum or by publishing an updated version of the Annex Pricing.

For the sake of clarity, this Offer does not cover the following calls to Proximus numbers (geographic and non-geographic) which are ported to other Networks.

These calls can be covered via a commercial agreement with Proximus related to transit services.

As a more general rule, this Offer does not consider aspects related to number portability.

Each Interconnect Agreement concluded with an Operator may include specific services negotiated between the two Parties which are not covered in the present Offer. Examples of such specific services, which Proximus can offer at the request of the Operator, are the conveyance of calls generated by the Operator's customers to the networks or facilities of other operators or of service providers with whom Proximus has appropriate contractual relations or access to Operator Assistance Services. The list of available services can be obtained by the Operator after the signing of a confidentiality agreement.

Any interconnect service supplied by an Operator to Proximus will be included in the Interconnect Agreement between Proximus and that Operator on the basis of the agreement reached between these Parties.

Proximus is not responsible for the content of the communications conveyed through its Interconnect Services.

This Offer only applies to services that are explicitly referred to in this Offer. In case particular applications are indicated in the definition of some services (see Annex Definitions), it is only applicable for the applications concerned. In the event of a request for interconnection, in respect of services that are not explicitly defined and covered by this Offer, or that are intended to be used for other applications than the ones described in this Offer, Proximus will examine and indicate to the requesting Party whether the conditions set out in the present Offer apply to the services concerned or whether there are objective criteria differentiating the different services at issue, or whether this service is not considered to be in the scope of the present Offer.

## 2 VoIP Interconnect Architecture

### 2.1 General

The Proximus Network has been divided for VoIP Interconnection purposes into 3 Access Areas. Proximus provides in each Access Area 2 Access Points. VoIP Interconnection to Proximus' Network is only possible at sites where Access Points are located.

The sites in the Operator's public Network at which VoIP Interconnection to that Network is possible, are also considered as "Access Points". Where necessary to avoid confusion, a distinction is made in the present Offer between "Proximus Access Points" and "Operator Access Points".

The interconnection of networks is implemented by means of an Interconnect Link. The Demarcation Point is located on the Interconnect Link at the connection panel and is the physical point where both Networks are interconnected and represents as such the boundary between the domains of responsibility of Proximus and the interconnected Operator.

Each of the Access Points are fully controlled by the Operator concerned. The technical requirements of the equipment at the Demarcation Point are defined in the Technical Specifications.

### 2.2 Traffic types

Traffic between the networks of the Operator and of Proximus can be of two types: OLO Interconnect Traffic (OIT) and Proximus Interconnect Traffic (BIT<sup>2</sup>). The drawing below gives a schematic overview:

<sup>2</sup> The abbreviation "BIT" stands for "Belgacom Interconnect Traffic" and is still commonly used to refer to "Proximus Interconnect Traffic".

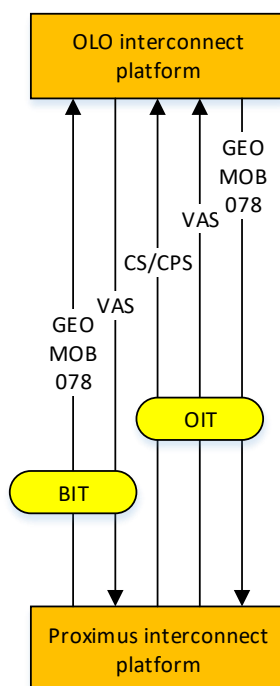


Figure 1: Traffic types

## 2.2.1 BIT

BIT consists of the following components:

- Calls from Proximus to GEO, MOB and 078 (SPL) ranges, to be terminated by the Operator;
- Calls, collected by the Operator, to 0800 (FPH), 070 (UAN) and 090x (PRM) ranges.

## 2.2.2 OIT

OIT consists of the following components:

- Calls from the Operator to GEO, MOB and 078 (SPL) ranges, to be terminated or transited by Proximus;
- Calls, collected or transited by Proximus, to 0800 (FPH), 070 (UAN) and 090x (PRM) ranges of the Operator.
- Carrier Selection calls, collected by Proximus, with the carrier code of the Operator.

## 2.3 VoIP Interconnect Links

The network of Proximus and the Operator shall be interconnected via at least two (2) Interconnect Links.

The IP Interconnect architecture must be 1+1 redundant (see the Technical Specifications). One link is considered the primary link and it will carry voice over IP (VoIP) and signalling (SIP) in the normal situation. The other link, the secondary link, will carry voice over IP (VoIP) and signalling (SIP) in case of failure of

the primary link. The secondary link must be able to carry the complete interconnect traffic in case the primary link fails. This setup will be used for OIT as well as for BIT.

There are two types of VoIP Interconnect Links: Proximus-Sited Interconnect Link (PSIL) and Customer-Sited Interconnect Link (CSIL) which are described hereafter.

### 2.3.1 Proximus Sited Interconnect Link (PSIL)

A “Proximus Sited Interconnect Link” is an Interconnect Link where Proximus offers the possibility to an OLO to provide the entire Interconnect Link including the transport equipment which is installed in a Proximus technical building. The OLO will install its cable infrastructure at least up to a manhole designated by Proximus in the immediate vicinity of the Proximus building in which the Access Point is located. Moreover, the OLO will install its network equipment in the OLO’s Colocation Area and will provide the needed IPv6 connectivity onto its network for the purpose of the VOIP interconnect services.

A PSIL will be used to carry OIT traffic (in some Interconnect Architectures, see 2.5, it can also be used for BIT traffic as secondary link).

Proximus offers six Access Points where the Operator can install the PSIL:

Street	Nr	ZIP Code	City Name	Colocation name	Access Area
Karel Coggestraat	2	2600	Berchem (Antwerpen)	BKC/xxx	Area North
Bennesteeg	14	9000	Gent	GEN/xxx	Area North
Sentier de la Limite	80	6060	Gilly (Charleroi)	GIL/xxx	Area South
Rue du Nord-Belge	6	4000	Liège	LGE/xxx	Area South
Ruisbroekstraat	17	1000	Brussels	STR/xxx	Area Center
Broekstraat	72	1000	Brussels	MAR/xxx	Area Center

The Proximus Sited Interconnect Links (PSILs) have a capacity of 1 Gbit/s per link. PSILs should be requested to two different Proximus Access Points in order to set up a 1+1 redundancy for the VOIP interconnect service. The technical requirements of the equipment at the Demarcation Point can be found in the “Technical Specifications” for VoIP Interconnect.

The Demarcation Point is located at the end of the indoor cable provided by Proximus connecting the Operator’s transmission equipment to the Proximus Access Point at the Operator side (including the attached connector if this connector has been delivered and fixed by Proximus). The connection of the cable to the equipment of the Operator is outside the responsibility of Proximus.

The technical, operational, billing, planning and financial conditions for the Colocation Services provided by Proximus to the Operator are described in the Colocation Agreement concluded between the Operator and Proximus for each Proximus building where Colocation Services are provided to the Operator. The Colocation Agreement is available on Proximus secured website.



The price of the indoor cable connection connecting the transmission equipment of the Operator located in its Colocation Area to the Proximus Access Point is indicated in the Annex Pricing.

An operator can for the purpose of the VoIP interconnection service rent a PSIL from another operator. However, a PSIL can never be shared between different operators (1Gbps interface per operator).

### **2.3.2 Customer Sited Interconnect Link (CSIL)**

The “Customer Sited Internet Link” provided is part of the Proximus network infrastructure. Proximus will deploy the needed network resources for the interconnection to an OLO Access Point in Belgium and shall install the necessary transport equipment at the OLO’s premises to offer a 1 Gbit/s interface to the OLO Access Point. The IPv6 connectivity from the selected OLO Access Point and the needed voice network resources on the OLO Network is to be foreseen by the OLO.

CSILs are proposed to two different OLO Access Points in order to set up a 1+1 redundancy for the VOIP interconnect service. Each Operator must offer at least two redundant Access Points. This involves access to the building and the room, floor space, power and cooling. It is highly recommended to align the technical requirements of the equipment at the Demarcation Point with the “Technical Specifications” for VoIP Interconnect.

The entire Interconnect Link is provided by Proximus (Party-A). Therefore, Proximus will install the relevant transmission equipment inside the Operator’s building provided that a number of minimum conditions are met. In that case, the Demarcation Point will be located in that Operator’s building.

The Operator (Party-B) can hire transport capacity on a Customer-sited Interconnect Link to carry its OIT traffic (for the applicable prices please see Annex Pricing).

## 2.4 Access Areas

Although all interconnect traffic can be delivered via one Access area, we recommend for Operators with a large<sup>3</sup> amount of traffic to interconnect to more than one Access Area, building two or three times (1+1) redundancy. In this way, traffic will be better spread over multiple Areas and the level of redundancy will be increased.

Traffic will be terminated under same conditions (see Annex pricing) regardless in which Area(s) where the operator is interconnected and regardless in which Area the call terminates.

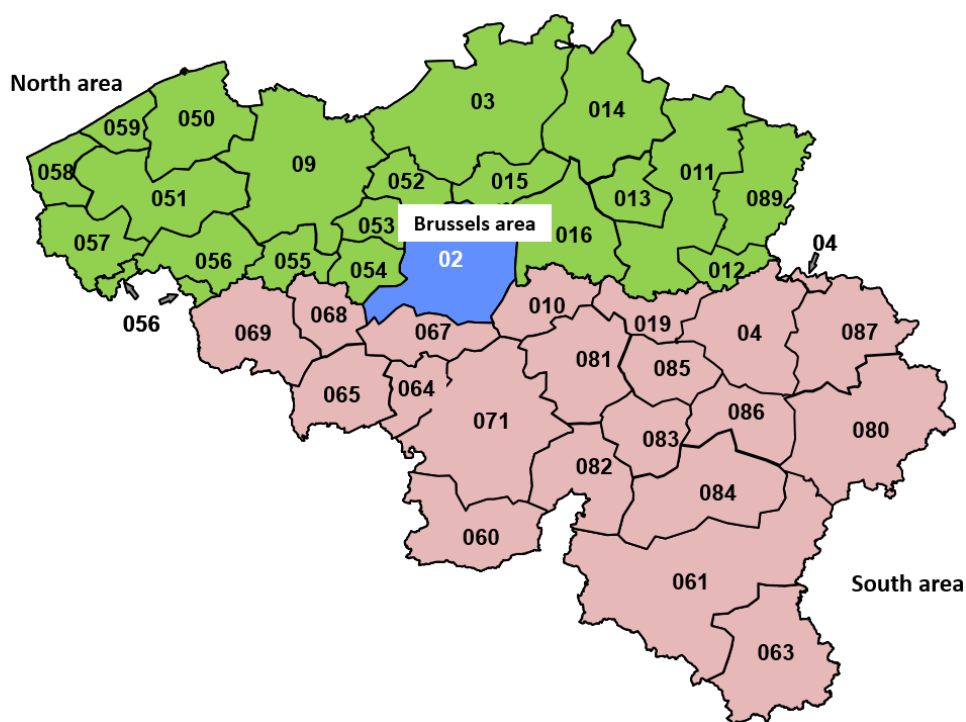


Figure 2: Access Areas

## 2.5 Interconnect Architectures

Depending if the OLO is using PSIL and/or CSIL, Proximus has defined three standard VoIP Interconnect Architectures. Proximus insists at spreading out the VOIP traffic at maximum over the available network

<sup>3</sup> Operator requesting capacity above 1G

resources in order to limit the impact of any single network failure and thereby securing the service at maximum for both OLO and Proximus. In case of large traffic, as mentioned in previous section, it is further recommended to interconnect via several access areas.

### 2.5.1 OLO is present in (at least) 2 Proximus Access Points

A pair of 1Gbit/s Customer Sited Interconnect Links in a 1+1 redundancy is setup to carry BIT traffic to 2 OLO Access Points in Belgium. The 1+1 setup is managed setting up the needed BGP4 routing between the Proximus\_PEs and the OLO\_PEs.

A pair of 1 Gbit/s Proximus Sited Interconnect Links in a 1+1 redundancy is setup to carry OIT traffic to 2 OLO Colocations of the Proximus Access Points. The 1+1 setup is managed setting up the needed BGP4 routing between the Proximus\_PEs and the OLO\_PEs.

Another option is to install 10 Gbit/s links.

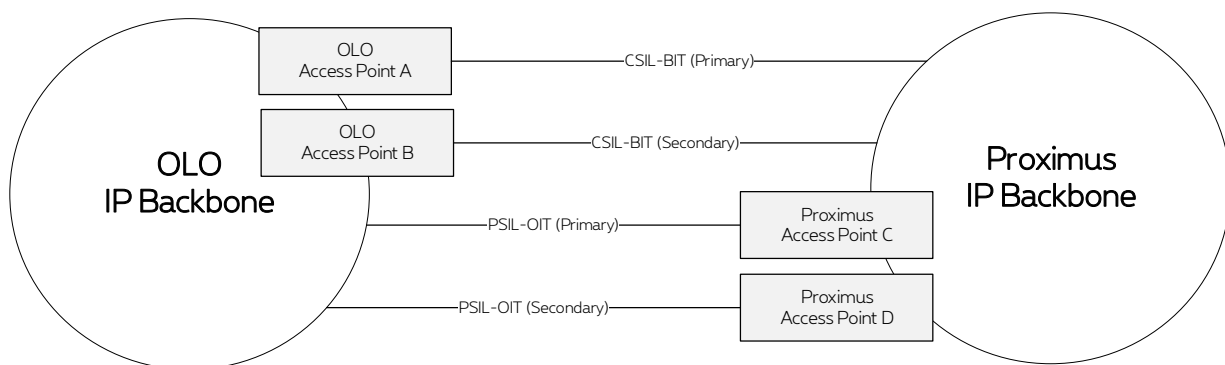


Figure 3

## 2.5.2 OLO is not present in Proximus Access Points

A pair of 1 Gbit/s Customer Sited Interconnect Links in a 1+1 redundancy setup is proposed by Proximus to carry BIT traffic to 2 OLO Access Points in Belgium. The 1+1 setup is managed setting up the needed BGP4 routing between the Proximus\_PEs and the OLO\_PEs. For reasons of geo-redundancy Proximus advises to not offer 2 OLO Access Points in the same Proximus Access Area.

OIT traffic will also make use of the CSIL transport. Proximus will invoice the OLO for the use of the CSIL according to the firmly ordered OIT capacity.

Another option is to install 10 Gbit/s links.

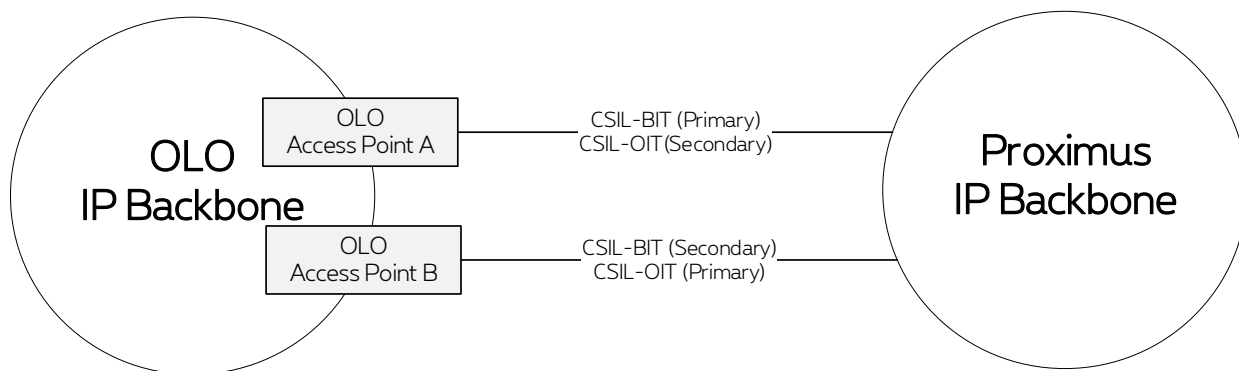


Figure 4

### 2.5.3 OLO is present in only 1 Proximus Access Point

A 1 Gbit/s Customer Sited Interconnect Link is setup to carry, in normal operation mode, BIT traffic (primary) to an OLO Access Point in Belgium.

A 1 Gbit/s Proximus Sited Interconnect Link is setup to carry, in normal operation mode, OIT traffic (primary) to an OLO Colocation of the Proximus Access Point.

The 1+1 redundancy will be achieved by setting up the needed BGP4 routing between the Proximus\_PEs and the OLO\_PEs.

In case of a CSIL link failure, the BIT traffic (secondary) will be transported over the PSIL link. In case of a PSIL link failure, the OIT traffic (secondary) will be transported over the CSIL link.

It is possible to build this interconnection architecture based on two 10Gbits/s links.

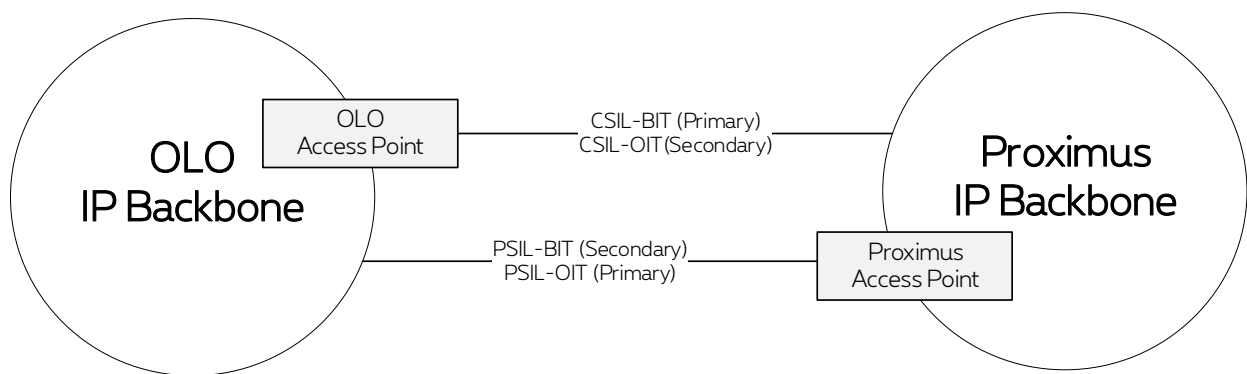


Figure 5

## 3 Technical conditions

Technical conditions for the VoIP interconnect services are included in the Technical Specifications which are available on the Proximus Wholesale website.

These includes (but not limited to) the following key requirements:

- Support of the SIP signalling protocol;
- The Operator must support the G.711, A-law codec;
- Offer at least 2 IPv6 subnets wherein an IBCF and an IBGF is addressable.

## 4 VoIP Interconnect Transport products

### 4.1 VoIP capacity

In addition to the physical interconnection links (PSIL or CSIL) described in previous sections, the VoIP interconnection between Proximus and the Operator is provided through IPv6 interconnection between the network elements responsible for VoIP Media (RTP), SIP Security and SIP signalling (SIP trunk) present in both networks.

To complete the transport part VLAN's, IP routing (BGP4) and capacity for both OIT and BIT traffic are to be determined and configured between Proximus and the Operator. The needed/agreed VoIP capacity for both the Operator and Proximus is managed by setting up Call Admission Control (CAC) on both Media (bandwidth) and SIP (simultaneous sessions) level for OIT and BIT traffic. More details on the available bandwidths and the prices can be found in the Annex pricing.

### 4.2 Responsibilities for the dimensioning the VoIP Interconnections

Each Operator is responsible for the dimensioning of the VoIP Interconnections required for the conveyance of its own traffic as defined below.

An Operator requesting Interconnection with Proximus is responsible for the dimensioning of the VoIP Interconnections conveying the OIT. Proximus is responsible for the dimensioning of the VoIP Interconnections conveying the BIT.

However, the dimensioning of the VoIP Interconnections for which Proximus is responsible and which carry non-mature traffic as defined in the Planning and Operations document will take into account the traffic forecasting data provided by the Operator.

As far as the quality of the Terminating Services, the Collecting Access Services and the Access Service for Calls to Value Added Services numbers of the Operator, is concerned, Proximus shall not be responsible for an inadequate dimensioning of the VoIP Interconnections for who's dimensioning the Operator is responsible.

Both Proximus and the Operator commit themselves to dimension the SIP trunks to an engineering blocking objective of maximum 1% during busy hours. Other specific rules will be followed for the dimensioning of (parts of) SIP trunks conveying special types of traffic (e.g. Calls to Emergency Services, explosive traffic...). The capacity of a VoIP Interconnections shall be dimensioned to carry all related SIP trunks.

## 5 Services

### 5.1 Calls to Proximus geographic numbers and split charging numbers

The Voice Telephony traffic generated by end-users on the Operator's Network and directed to the Proximus Fixed Network is to be conveyed from an Interconnected Operator Access Point to a Proximus Access Point.

The prices applicable to the Terminating Service for Calls to Proximus geographic numbers or Split Charging numbers which are not ported outside the Proximus Network are indicated in the Annex Pricing.

The prices indicated are also applicable to Calls to non-Proximus geographic numbers or Split Charging numbers ported to the Proximus Network, which are handed over by the Operator at a Proximus Access Point with a routing number providing all the necessary information to route the Calls concerned to their final destination in the Proximus Network.

The Operator is responsible for the setting of the retail prices and for the invoicing of its end-users for the Calls to Proximus geographic numbers or Split Charging numbers.

The Operator shall ensure the transmission of the CLI and that the CLI has been screened in the network in which the Call was originated, against the Relevant Numbering Scheme. Network screening shall imply that there will be at least verification by the Operator that the CLI concerned is accurate and that the necessary steps are taken to ensure that the original and appropriate CLI has not been modified or manipulated.

### 5.2 Calls to Emergency Services

#### 5.2.1 Calls to 3- or 6-Digits Emergency numbers

The access to 3- or 6-Digits Emergency Services Numbers offered by Proximus covers the termination by Proximus of Calls in pre-determined installations of the Emergency Services all over Belgium. Different numbers of three or six digits are allocated for different types of Emergency Services. The present section of this Offer covers the services of calling the emergency numbers, described in the Royal Decree of 02/02/2007. Calls to 3- or 6-Digits Emergency Services are free of charge for the calling end-user in accordance with the regulatory framework.

Given the nature of the 3- or 6-Digits Emergency Services, the access to these services by interconnected Operators is subject to a number of technical conditions. In particular, the Operator will have to insert some specific information in the "called party number" parameter of the signalling messages sent to the Proximus Network as described in the relevant technical specifications. The Network of the Operator must pass the complete and correct CLI to the Proximus Network.

The Operator shall take any measurement to give the highest priority to emergency calls under conditions of high load.

The prices applicable for the termination by Proximus of Calls to the 3- or 6-Digits Emergency Services are set out in the Annex Pricing.

### **5.2.2 Calls to Emergency Services which are not addressed by 3 Digits numbers**

The prices applicable for the termination by Proximus of Calls to Emergency Services which are not addressed by a 3-digit number are set out in the Annex Pricing



## 6 Quality of the interconnect service <sup>4</sup>

### 6.1 Traffic management

Proximus dimensioned the internal and interconnect resources of its network to carry the forecasted traffic with a loss of maximum 1% during peak hour, based on the Erlangen-B tables.

In the event that a particular situation is susceptible to disturb temporarily the conveyance of traffic within its Network, Proximus could be constrained to implement the classical measures of traffic management in order to limit its effect on the quality of the service provided to its customers as well as to the interconnected Operators. These measures of traffic management are applied to Proximus and Operator traffic without discrimination. The target figures given above do not include cases which are caused by the said measures of traffic management. The Parties shall inform each other about the operational traffic management strategies to protect the quality of service and to alleviate short term overloads due to abnormal traffic patterns or failed facilities.

### 6.2 Speech quality

Proximus applies Call Admission Control on agreed bandwidth and number of simultaneous calls, in order to guarantee the expected speech quality. The expected speech quality depends on the negotiated codecs (narrowband or wideband).

## 7 Evolution of the Interconnect offer

Proximus will inform the Operators about the changes in its infrastructure that have an effect on the Interconnect Services Proximus offers. In as far as such technical changes are concerned that have a foreseeable impact on the Interconnect Services, Proximus will communicate such information as soon as reasonably practicable and not later than 12 months in advance of the planned changes (except if the change concerned is due to unforeseen circumstances and therefore it does not allow Proximus to respect the above-mentioned period).

<sup>4</sup>This Chapter does not apply to the connectivity services.

## 8 Organized planning for Interconnect Services

Interconnect negotiations can only start after the transmission to Proximus of a Statement of Requirement (SoR) document duly signed (this document is available on request or on the Proximus Wholesale website-secured section). This document represents the official request from the Operator to start negotiations in view of establishing an interconnection with Proximus.

The bringing into service of an Interconnection will be subject to the signature of an Interconnect Agreement with Proximus covering the services to be provided and, in the event of the extension of the services included in an existing Interconnect Agreement, the bringing into service of additional services. Any bringing into service of an additional Interconnect Service is subject to the conclusion of a complete commercial agreement concerning the additional Interconnect Service concerned. The reception by Proximus of the confirmation that the Operator has been granted the adequate type of authorization entitling it to the benefit of the present Offer is one of the prerequisites for the conclusion of an Interconnect Agreement.

In order to have an optimized planning of the resources needed for the bringing into service and the subsequent phases of an Interconnection and in order to preserve the appropriate dimensioning of Proximus' Network enabling Proximus to handle the interconnect traffic as well as its own traffic in a proper manner, the Operator will have to supply forecasting data for traffic and Capacity according to the procedures, which are described in detail in the "Planning & Operations Document". The information to be communicated to Proximus related to the forecasting of the interconnect capacity to be delivered by the Operator shall be treated as confidential by Proximus and shall only be used for the purpose for which it is transmitted. The Proximus unit that receives the information will not communicate it to other units within Proximus that are not concerned with the interconnection procedures neither to Proximus' subsidiaries.

### 8.1 Testing Planning

In order to establish a VoIP interconnection, being for an operator having already a TDM interconnect ("existing Operator" here below) with Proximus or for a new interconnect (no TDM interconnect currently with Proximus), a number of tests should be passed before proceeding to the migration (from TDM to IP) or the bringing into service of the VoIP interconnection.

The tests are grouped in test phases, each of them requires a 4 weeks timeslot (more information on the content of each testing phase is described in the Planning and Operational document):

- Test Phase 1: Connectivity tests
- Test Phase 2: Protocol tests
- Test Phase 3: Service Plan and billing tests

The selection of the testing timeslots will be done in collaboration with the Operator taking into account the available slots and testing resources.

In order to have optimal allocation of testing resources, Proximus will provide on its website a “Testing planning” which will contain the available testing timeslots

Due to technical restrictions and capacity limitations of the testing environment it is not possible to implement several operators in parallel. In order to have an optimal use of our resources, the operators will be implemented in cascade in such way that two operators will never be in the same test phase at the same time. Due to these restrictions the maximum number of operators that can be implemented per year is currently set at six (6). For operators with several interconnections a timeslot for each different interconnection will be appointed.

The Operators interested to set up a VoIP interconnection should return the SoR completed to Proximus. Proximus will analyse the received SoR, once approved this can be signed by both Proximus and OLO. In case Proximus receives more requests for VoIP interconnection or migration compared to the available testing slots, Proximus will prioritise the requests based on the answers provided to the questionnaire annexed to the SoR reflecting the readiness of the operator to establish a VoIP interconnection.

In case no prioritisation for the testing slots is possible based on that questionnaire, Proximus will consider the date of the reception of the completed and accepted SoR sent by the Operator to prioritise the requests. If the Operator is not ready for the testing of VoIP interconnection for some essential aspects linked to the conditions set in the present Offer, Proximus will refuse the SoR.

In order to respect the testing planning agreed with the Operators, the reserved testing windows needs to be respected by each operator. In case the Operator appears not to be ready or capable to comply with the different test phases in the agreed planning, Proximus will, if needed, grant the slots allocated to this operator to another Operator.

The links needed for testing, are depending upon the architecture. Testing can only start when all needed links are ordered and available. Once the links are in place, test VLANs will be created for OIT and BIT traffic according to the chosen architecture.

In case the 1 CSIL + 1 PSIL or CSIL only architecture is selected, only one IL is sufficient to create a TEST configuration consisting of an OIT VLAN and a BIT VLAN.

If the architecture consists out of (at least) 2 CSILs + 2 PSILs, minimum one CSIL and one PSIL is needed for testing. In this case the TEST configuration will consist out of an OIT VLAN, configured on the PSIL and the BIT VLAN will be configured on the CSIL.

Next an IPv6 connectivity between the OLO and the Lab of Proximus is mandatory. Proximus will invoice the OLO for the use of the CSIL (and PSIL if applicable) during testing.

## 8.2 Transition period

An Operator that applies for migration from TDM interconnect to VoIP interconnect, must be able to move all its traffic from the old to the new interconnect. The old and the new interconnect will be used in parallel during only a short transition period (typically a few weeks). No separate routing rules will be put in place for analogue endpoints and for IP endpoints in the Operator’s network.

## 9 Financial Guarantees

### 9.1 General Principle – Prepayment

Notwithstanding anything to the contrary in the Interconnection Agreement and to guarantee the payment by OLO for due Interconnect Services provided by Proximus, billed (invoice & statement) on monthly basis with a 30 days payment term as of bill date, OLO will execute a prepayment to Proximus. The prepayment amount will be set to one month of average of latest trimester's Interconnect Services billed amounts to:

- 1) OLO solely.
- 2) both Parties if Netting Agreement is signed with OLO.

For OLO's not yet in service and concluding a new Interconnect Agreement, the first prepayment shall amount to at least 75% of the ordered VoIP Interconnect Transport (see Annex Pricing), to be paid within 10 working days from the start of the Agreement.

If the Operator disagrees with a bill received from Proximus, it must notify in writing Proximus thereof before the payment due date of concerned bill and in accordance with the relevant provisions of the Interconnection Agreement.

### 9.2 Sufficient Creditworthiness

Prepayment will not be required as long as one of below options is met:

- 1) OLO has sufficient creditworthiness, as evidenced by either of the following alternatives:
  - a) A rating equal to or better than [Moody's rating](#) "Ba2";
  - b) a similar rating to Moody's "Ba2", provided that
    - i) such rating is generally accepted by the market as giving similar reliability as Moody's and
    - ii) such rating is generally reviewed and regularly updated.
- 2) OLO provides an irrevocable and unconditional parent corporation guarantee for the debts incurred by OLO in the application of the Interconnect Agreement and provided that the parent company issuing the guarantee has sufficient creditworthiness as defined above.
- 3) OLO provides Proximus with an irrevocable and unconditional bank guarantee on first demand issued by a reputable financial institution established in the EU, issued for a minimum period of three years and for an amount set to three months of average of latest semester's Interconnect Services billed amounts to:
  - a) OLO solely.
  - b) both parties if Netting Agreement is signed with OLO.  
Proximus has the right to require an adaptation of the deposit amount every semester, for which OLO will undertake necessary steps to ensure adaptation within 10 working days.
- 4) OLO has constituted a Deposit on an escrow account with a reputable financial institution established in the EU. The deposited amount will be set to three months of average of latest semester's Interconnect Services billed amounts to:
  - a) OLO solely.
  - b) both parties if Netting Agreement is signed with OLO.  
Proximus has the right to require an adaptation of the deposit amount every semester, for which OLO will undertake necessary steps to ensure adaptation within 10 working days.

In absence of payment by OLO of due amounts under the interconnect agreement on due date, the financial institution or parent corporation will wire the overdue amounts to Proximus upon Proximus request. The interests and costs linked to the above options remain property of OLO.

As soon as above described credit worthiness, parent corporation guarantee, bank guarantee or escrow account would insufficiently cover the due amounts during the course of the Interconnect Agreement, OLO will provide Proximus with additional prepayment or other financial guarantees as defined in the present chapter within 10 working days as from the event date.

## 9.3 Payment failure

Without prejudice to any other legal or contractual remedies and notwithstanding anything to the contrary in the Interconnection Agreement, in the event OLO fails to pay on due date, either any due amount or prepayment, Proximus shall be entitled to execute the following alternatives until full payment is made:

- suspension of the Interconnect Services in accordance with the guidelines related to the termination market for fixed networks as foreseen by the BIPT;
- refusal of any new request to create or change Interconnect link / capacity;
- refusal of any other new Interconnect Services.

## 9.4 Netting Agreement

Both Parties agree to proceed to direct billing (i.e. invoices & statements) without prior exchange of reports.

Both Parties agree to set-off by end of the month their bilateral bills, issued at the latest on the 15th day of the month, excluding the rightfully disputed amounts. The set-off will occur through payment by the net payer.

To do so, Proximus will communicate an overview to OLO of all outstanding bilateral bills, indicating the disputed or netting amount to the other Party for approval.

Disputed amounts will be handled in accordance with the conditions set out in the relevant Agreement.

If for any reason a bill would be issued only after the 15th of the month, both Parties agree that the concerned bill shall be subject to payment netting by end of subsequent month.

Without prejudice to the above, in case payment wouldn't have occurred for any reason, both Parties hereby confirm that this Agreement does not release any Party to pay the bills issued by the other Party on their payment due date.

The rights in the Netting Agreement will not preclude nor affect in any way the right of any Party to take action against the other Party to reclaim any amount that they are owing to each other.

## ANNEX 1 Practical Information

Requests for Proximus documents mentioned in the present Offer can be made in writing by interested parties at the following Proximus contact point:

Proximus  
Carrier & Wholesale  
Boulevard du Roi Albert II, 27  
1030 Brussels

e-mail: [wholesale@proximus.com](mailto:wholesale@proximus.com)

The transmission by Proximus of the documents mentioned is subject to the prior signing of a confidentiality undertaking by the requesting party. Some documents are also available on Proximus secured website (to be found at [www.proximuswholesale.be](http://www.proximuswholesale.be)) which can be accessed by authorized parties after the receipt of a password.

Any requests for information related to the Offer should be addressed in writing to the above mentioned Proximus contact point. In particular, in the event of doubt as to the interpretation of the provisions of this Offer, Proximus should be contacted.



## ANNEX 2 Pricing

The pricing of VoIP Interconnect services covered by the present Offer can be found in a separate document called "Annex 2 Pricing" available on Proximus Wholesale website.



# ANNEX 3 Planning & Operations

Is provided separately



## **ANNEX 4 Service Level Agreement**

SLA aspects are covered in the Planning & Operations document.

## ANNEX 5 Definitions

The definitions in this Offer are proper to this document and are without prejudice to the definitions contained in the applicable regulatory framework.

The capitalized terms in the present Offer have the meaning as defined below:

Access Area	Area within Promus's Network as defined in the present Offer, in which Interconnect Services are offered at specified Proximus Access Points
Access Point	Location of the physical interface within a network to which Interconnect Links can be connected by another party.
Act	In the present Offer "the Act" means "the Act of 13th June 2005 concerning Electronic Communication Services"
Area Access Point	Access Point through which Interconnect Services can be obtained.
BGP4	Border Gateway Protocol 4
BIPT	Belgian Institute for Postal services and Telecommunications
CAC	Depending on the context, See Communication Access Code or Call Admission Control
Call Attempt	An attempt to establish a Call, without entering conversation phase.
Call Setup	The procedures to establish a Call up to the conversation phase.
Call	The establishment of a connection through a Network and the transmission and the delivery of a communication, from the terminal on which this communication has been generated to the terminal to which this communication is addressed, or to a network platform or to any other facility giving an automatic answer in the cases where the connection cannot be established.
Call Admission Control (CAC)	Prevents oversubscription of VoIP networks. It is used in the call set-up phase and applies to real-time media traffic as opposed to data traffic.
Calling Line Identification (CLI)	The identity of the calling line, based on E.164 numbers, validated by the originating network and

	transmitted to the terminating network by means of signalling.
Calling Line Identification Presentation (CLIP)	Terminating service that provides the calling party's number to the called party
Calling Line Identification Restriction (CLIR)	Originating service that restricts the presentation of the calling party's number to the called party
Capacity (of the Interconnect Link)	Parameter for the communication volume between Proximus and the Operator. Capacity can be expressed as bandwidth or as number of simultaneous calls. It is applicable to an Interconnect link or an interconnect VLAN or an interconnect trunk group.
Carrier Pre-Selection (CPS)	Pre-configured selection of an Operator allowing the access to basic telephony services, provided by that Operator without the need for the end-user to dial the CSC
Carrier Selection (CS)	Selection of an Operator by means of a CSC dialled by the end-user allowing the access to basic telephony services provided by that Operator
Carrier Selection Code (CSC)	A CAC of the type 15XX or 16XX, defined and allocated by the BIPT, used to select an Operator in order to access basic telephony services provided by that Operator as described in Chapter 4
Chargeable Call Duration	The time interval, rounded up to the nearest second, that elapses between: <ul style="list-style-type: none"> <li>• the moment at which the answer signal (in the backward direction) is detected at the concerned Access Point</li> <li>• the moment at which the clear forward or clear backward condition is detected at the concerned Access Point</li> </ul>
Collecting Access Services	Interconnect Services in which Proximus conveys, calls generated by its end-users to an Access Point of the Operator in order to allow the access to a range of services provided by the interconnected Operator.
Colocation Agreement	An agreement concluded between Proximus and an Operator which covers, in particular, the technical, operational, billing, planning and financial conditions for the Colocation Services provided by Proximus to the Operator

Colocation Area	Part of a Colocation Room rented to a single Operator
Colocation Room	Part of a Proximus building, designated by Proximus, where Operators can install their equipment as described in the Colocation Agreement
Colocation Services	Colocation Services as described in the Colocation Agreement
Communication Access Code (CAC)	A routing indicator consisting of 4 digits with the format 1YXX (Y=5,6), used in relation with Collecting Access Services.
Customer-sited Interconnect Link (CSIL)	Interconnection in which the Interconnect Link is provided in its entirety by Proximus up to an Access Point of the Operator
Demarcation Point	The physical point (interface or patch panel) where one Parties' responsibility for the Service ends and the other Parties obligations start. It identifies and establishes the dividing line between the appropriate areas of responsibilities of the Parties.
Emergency Call	Call to one of the numbers, specified in the Royal Decree 02/02/2007
Freephone Service (FPH)	Service which allows the calling party to make free of charge Calls, which are paid for by the Service Provider
Interconnect Agreement	An agreement concluded between Proximus and an Operator which describes, in particular, the technical, operational, billing, planning and financial conditions for the Interconnect Services between Proximus and the Operator and the provision of the Interconnection of the two Networks
Interconnect Link: (VOIP)	A Link between the network of Operator-1 and an Access Point located, in the Network of Operator-2 in order to enable the provision of Interconnect Services,
Interconnect(ion) Services	Interconnect(ion) Services described in the present Offer
Interconnect(ion)	Cf. the Act, article 2, 19°
Link	Set of telecommunication facilities necessary to establish one or more transmission paths between two locations
Network	Cf. the Act, article 2, 3°

Operator Interconnect Traffic (OIT)	The traffic for which the Operator is responsible with regard to cost, engineering and operations. The traffic type for a particular interconnect service is defined in the related Service Plan.
Optical Distribution Frame (ODF)	A frame used to provide cable interconnections between communication facilities, which can integrate fibre splicing, fibre termination, fibre optic adapters & connectors and cable connections together in a single unit
Party	Depending on the context, Proximus and/or the Operator entering into an Interconnect Agreement
Point of Presence (POP)	Location where the Service Operator's System is installed and to which Interconnect Links can be connected
Premium Rate Numbers (PRM)	Telephone numbers (090X) with a higher price charge than normal calls used for added value services
PE	Provider Edge Router
Proximus Interconnect Traffic (BIT)	The traffic for which the Proximus is responsible with regard to cost, engineering and operations. The traffic type for a particular interconnect service is defined in the related Service Plan
Proximus-sited Interconnect Link (PSIL)	Interconnect Link that is provided in its entirety by the Operator, subject to what is stated in this Offer and in the Colocation Agreement entered into by the Parties concerned
Public Network Operator	Moral or physical person that fulfils the conditions required by the Regulatory Framework for electronic communications to provide a public Network
Service Plan	The description of an Interconnect Service, offered by a party to the other party...
SLA	Service Level Agreement
Split Charging Service (SPL)	Service which allows an Operator to share the charges for a Call between the calling and the called parties involved. This Service can be accessed by the end-user by dialling specific number ranges, which are allocated by the BIPT to that particular Service
Successful Call	A call during which an answer signal (in the backward direction) has been received in accordance with the applicable international recommendations

System	The telecommunication infrastructure used by a Service Operator for the provision of public Voice Telephony Services
Telecommunication Services	Cf. the Act, article 2, 5°
Terminating Service	Interconnect Services offered at a Proximus Access Point in which Proximus conveys the Calls handed over by the Operator and directed to Proximus geographic numbers, Split Charging and Emergency Services numbers from that Proximus Access Point to the destinations concerned
Traffic (Flow)	A set of Calls characterized by the fact that all the Calls which constitute this flow have a same direction (towards or from an Access Point)
Universal Access Number (UAN)	Universal number (070X) without any geographic linkage used for added value services.
Unsuccessful Call	All calls which have passed through the Proximus Access Point and which are not Successful Calls
Value Added Service (VAS)	A Telecommunication Service which can be accessed via the public telephone network by dialling a non-geographic number, excluding in particular the numbers related to mobile networks, Emergency Services, Split Charging Service and Operator Assistance Services
Voice Telephony Service Operator	Moral or physical person that fulfils the conditions required by the Regulatory Framework for electronic communications to provide a Voice Telephony Service
Voice Telephony Service	Service offered to the public for commercial exploitation of direct transport of voice in real time via a public network and giving the possibility to each user to use the equipment connected to a network termination point in order to communicate with another equipment user connected to another network termination point
VoIP Reference Interconnect Offer	The present Offer for Interconnect Services related to voice interconnection between networks based on an IP protocol.
VoIP	Voice over Internet Protocol
Working Day	Each day except Saturday, Sunday and the national legal holidays in Belgium