



Proximus Reference Offer for Bitstream Access

Covering the technology Fiber PON

Annex 3: Planning & Operations

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1 Introduction

1. This Annex describes the Planning and Operations principles related to the provisioning and repair of the Bitstream Service configured with PON technology. PON in this document refers to both GPON and XGS-PON, unless otherwise specified. LEX in this document refers to both Proximus and non-Proximus buildings hosting the OLT equipment, unless otherwise specified.
2. Both Parties will use at any time their best efforts to ensure an adequate level of service provisioning both between the Parties and towards the End-Users concerned.
3. In the event that difficulties or problems arise in respect of Planning and Operations, the Parties will perform all necessary co-operation and consultation with a view to developing appropriate and workable solutions.
4. All relevant technical documentation, User Guides (e.g. for Multi Service Ordering interface) and order forms (e.g. for OAL) if any can be retrieved from the secured part of the Proximus wholesale website for this offer.

2 Terminology

5 Partner Technician : subcontractor of Proximus who, under the responsibility of Proximus, executes the required tasks to technically activate the End-User line requested by the Beneficiary on the Proximus network. This type of technician implies, on the other hand, the signature of a contract between the Beneficiary and one of the subcontractors of Proximus so that the chosen subcontractor executes during the same intervention both the technical activation of the End-User line and the activation of services at End-User's premises. Such contract will notably cover the terms and conditions agreed between the subcontractor and the Beneficiary regarding the planning and booking of the resource capacity and appointment. The list of the possible subcontractors is documented in the "MSO User Guide" and can be requested by the Beneficiary to its Proximus SPOC in case of interest.

6 Proximus Technician : technician or splicer (employee or subcontractor) who, under the responsibility of Proximus, executes the required tasks to technically activate the End-User line requested by the Beneficiary on the Proximus network.

67 JV Technician: technician or splicer (employee or subcontractor) who, under the responsibility of the concerned JV, executes the installation of the End-User line requested by the Beneficiary on the JV passive network. After the execution of the JV tasks (up until the ONTP), the tasks to activate the End-User line will be executed either by a Partner Technician or by a Proximus Technician.

78 "Small Network Adaptations (SNA)" refer to works executed by splicers during the connection of a new End-User line (valid in repair and provisioning process (installation method "with customer visit splicing included")), while "Splicing Interventions" refer to works executed by splicers during the repair of an existing and active End-User line.

89 Useless End-User visit (provisioning and repair) occurs when the Proximus JV or Partner Technician is not able to perform his intervention further to Beneficiary's request. A useless End-User visit can happen for the following reasons:

- End-User absent,
- End-User absent after call,
- End-User objects to installation or repair,
- Cancel requested by End-User,
- End-User not ready for installation or repair, site not ready,
- Contact number of End-User incorrect, End-User cannot be contacted after absence,
- SNA with additional work required on private domain (while order submitted with "Cost estimate not allowed" indication),
- Wrong installation address (detected by the technician while doing an End-User visit),
- Fiber not allowed due to syndic/owner decision (detected by the technician while doing an End-User visit).

910 Multiple useless End-User visit (provisioning and repair) occurs when for a third time the Proximus, JV or Partner Technician is not able to perform his intervention further to Beneficiary's request. A useless End-User visit can happen for the following reasons:

- End-User absent,
- End-User absent after call,
- End-User objects to installation or repair,
- Cancel requested by End-User,
- End-User not ready for installation or repair, site not ready,
- Contact number of End-User incorrect, End-User cannot be contacted after absence,
- SNA with additional work required on private domain (while order submitted with "Cost estimate not allowed" indication),
- Wrong installation address (detected by the technician while doing an End-User visit),
- Fiber not allowed due to syndic/owner decision (detected by the technician while doing an End-User visit).

3 Acronyms

GPON	Gigabit Passive Optical Network
XGS-PON	10 Gigabit capable Symmetric Passive Optical Network
Bitstream	Unless specified otherwise, the word Bitstream in this document equally refers to the three following types of service: with Shared, with Dedicated or with Single VLANs, delivered with PON technology.
<u>JV</u>	<u>Joint Venture. It refers to any partnership functioning as a Joint Venture or alike.</u>
OLO	Other Licensed Operator
CWS	Carrier and Wholesale Solutions
DARE	Diagnosis Analysis and Recovery Engine
FUT	Friendly User Testing
LEX	Local Exchange
OLT	Optical Line Terminal. End point of a Passive Optical Network, performing conversion between electrical signals used on the Proximus Ethernet backbone and fibre optic signals used by the Passive Optical Network, and coordinating the multiplexing between the ONTs of the PON.
DTP	Distribution Termination Point (X = underground; F = façade)
SRV	Speedpipe Rohr Verband
ONTP	Optical Network Termination Point. Box that terminates one fibre in the Living Unit or in the technical room (for some MDUs).
BDFO	Building Distribution Frame Optical
ONT	Optical Network Terminal. The ONT (optical modem) is an active network element that is controlled via the OLT.
SDU	Single Dwelling Unit. An SDU corresponds to a building used by one family or one group of persons, identified as one single End-User.
MDU	Multi Dwelling Unit. An MDU corresponds to a building used by several families or several groups of persons, each identified as one single End-User.
PON	Passive Optical Network
<u>PoP</u>	<u>Point of Presence</u>
RFD	Request For Design
P-Bit	Priority Bit
QTM	Quality Team Meeting
SNA	Small Network Adaptations
RGIE/AREI	Règlement Général sur les Installations Electriques / Algemeen Reglement op de Elektrische Installaties
KLIM	Kabel- en Leidingen Informatie Meldpunt
KLIP	Kabel- en Leidingen Informatie Portaal
GIPOD	Generiek Informatieplatform Openbaar Domein (platform dedicated to road worksite coordination in the Flemish Region)
OSIRIS	Platform of Brussels Mobility that is dedicated to road worksite coordination in the Brussels-Capital Region
POWALCO	Plateforme Wallonne de Coordination de Chantier
GUI	Graphical User Interface

SOA	Service Oriented Architecture
SOR	Statement Of Requirements
SPOC	Single Point Of Contact
TSI	Technical Situation
UNI	User-Network Interface
UTAC	Universal Telecom Access
VLAN	Virtual Local Area Network
MSO	Multi Service Ordering, also known as WSO (Wholesale Service Ordering).
TOC	Technical Order Confirmation
TEX	Technically Executed
OC	Order Closed
XSD	XML Schema Definition

4 Exchange of information

11. This chapter includes some communication guidelines in order to ensure a good interchange of information and to define an effective communication channel that focuses on both improving the comprehension and execution of the processes.

4.1 Points of contact

~~10-12.~~ A Key Account Manager acting as Single Point of Contact (SPOC) to Proximus for the Beneficiary will be in charge of all matters regarding the day-to-day management of the present offer.

~~11-13.~~ An escalation matrix, documented on the secured part of the Proximus wholesale website, may be used by the Beneficiary in case of unresolved issue requiring the escalation to a higher level than the day-to-day Proximus representatives.

4.2 Preliminary Exchange of Information for the initial setting up

~~12-14.~~ Without prejudice to what is stated above, it is recommended that the Beneficiary provides a Statement Of Requirements (SOR) to Proximus as early as possible in any discussions between the Beneficiary and Proximus. The SOR is sent by registered mail to the SPOC of Proximus. After the receipt of the SOR, Proximus shall notify to the Beneficiary its observations, if any, concerning the SOR. In particular, when appropriate, Proximus may request additional information to complete the information contained in the SOR. For more information on the SOR, reference is made to Appendix A of this document.

4.3 Quality Team Meeting

~~13-15.~~ The “Quality Team Meeting” or “QTM” is a meeting between both Parties to supervise, discuss and examine at a general level the technical and operational application of this offer, in particular, the implementation of the respective obligations of the Parties, as described in this offer.

~~14-16.~~ The QTM targets to be organised on a quaterly basis at Beneficiary’s request and best convenience. Each Party is entitled to call additional meetings within reasonable notice if judged reasonably useful. Each Party will be represented at the QTM by its SPOC accompanied by any staff as deemed necessary by the relevant Party.

~~15-17.~~ In addition to the QTM, the Parties will be allowed to request for the set-up of any other bilateral working group in charge of discussing and agreeing on any technical or operational issues, including more specialized members on the specific topic.

5 Ordering of an OLO Access Line

5.1 General

~~16-18.~~ Before the Beneficiary can submit an order for the activation of Bitstream on a specific End-User line, an Ethernet OLO Access Line needs to be in service in the relevant Service Area.

~~17-19.~~ The ordering of an OLO Access Line, between a Proximus Service PoP and the Beneficiary's equipment, shall be done through the use of the specific templates provided in Appendix D of this document.

~~18-20.~~ Irrespective of the terms and conditions stated below, Proximus reserves the right to refuse orders if the volumes requested by the Beneficiary are not in line with reasonable market demands. In the event of such a refusal, Proximus will provide the Beneficiary with the reasons for the refusal and the Parties will need to enter into a good faith discussion for finding a solution to deal with the difficulty that has arisen.

5.2 Ordering procedure

~~19-21.~~ The Beneficiary can order its OLO Access Line through a firm order. A firm order consists of the requested OLO Access Line, per type of service (Appendix D). Together with the firm order, the Beneficiary includes the date when he wants the OLO Access Line to be in service and the reference of the pre-study (RFD). In case data is missing or is not correct, the template will be rejected. In the latter case, Proximus will indicate the reasons of the rejection on the template. All firm orders will be submitted by e-mail to the assigned pre-sales manager of Proximus.

~~20-22.~~ When public infrastructure works have to be realized, several actions and several actors can extend the time needed for the provisioning of OLO Access Lines. Examples of interventions can be:

- Studies such as relevant street surveys
- Creation of the implementation plan
- Request to Public Authorities for authorization to realize works on the Public Infrastructure (the targeted lead time (+/- 2 months) will be mentioned in the Request For Design)
- Realization of the works

~~21-23.~~ In the event that difficulties or problems arise in this respect, the Parties will use all necessary co-operation and consultation with a view to developing appropriate and workable solutions subject to agreement between the Parties.

~~22-24.~~ In very exceptional situations, significant delays may be experienced :

- In case of periods of large demands that could not be foreseen,

- In an emergency situation (i.e., exceptional cases of *force majeure*).
In the event of such exceptional situations, a notice will be sent to the Beneficiary.

23-25. When the installation of the OLO Access Line is complete, Proximus will confirm it to the Beneficiary through e-mail.

6 Ordering of Shared VLAN Transport

6.1 Activation of Shared VLAN Transport ('Provide')

6.1.1 General

24-26. The Beneficiary will order bandwidth between each LEX in which the Beneficiary wants to connect End-Users and the Proximus Service PoP to which the Beneficiary is connected. Proximus does the set-up and the configuration of the Shared VLAN, between the LEXs from which the End-Users depend and the Beneficiary's equipment, on behalf of the Beneficiary.

25-27. Irrespective of the terms and conditions stated below, Proximus reserves the right to refuse orders if the volumes requested by the Beneficiary are not in line with reasonable market demands, i.e. in case of massive and unexpected orders of a Beneficiary that would paralyze the Proximus ordering system. In the event of such a refusal, Proximus will provide the Beneficiary with the reason for the refusal and the Parties will need to enter into a good faith discussion for finding a solution to deal with the difficulty that has arisen.

6.1.2 Prerequisites

26-28. An OLO Access Line with sufficient available capacity has to be implemented between a Proximus Service PoP and the Beneficiary's equipment.

6.1.3 Ordering procedure

27-29. The Beneficiary can order a Shared VLAN through a firm order initiated via MSO. A firm order consists of the requested Shared VLAN with its associated parameters (bandwidth, service, OAL, ...). Orders will be considered as valid only when they are properly completed. In case data is missing or incorrect, the order will be submitted to the Beneficiary for correction or will be discarded. In the latter case, Proximus will indicate the discard reason in the Discard message. For detailed information on the ordering process, reference is made to the "MSO User Guide" document stored on the secured part of the Proximus wholesale website.

28-30. In very exceptional situations, significant delays may be experienced:

- In case of periods of large demands that could not be foreseen,
- In an emergency situation (i.e., exceptional cases of *force majeure*).

In the event of such exceptional situations, a notice will be sent to the Beneficiary.

29-31. When a Shared VLAN is activated by Proximus, the Beneficiary will be provided with all the necessary information in order to configure the related VLAN at his side of the network.

6.2 Change of Shared VLAN Transport ('Change')

6.2.1 General

~~30-32.~~ The Beneficiary can request, within the limits of the Shared VLAN specifications mentioned in this offer (allowed Shared VLAN Bandwidth in function of the service),

- an upgrade of the Bandwidth of each Shared VLAN he ordered between a specific LEX and the Service PoP to which he is connected;
- a downgrade of the Bandwidth of each Shared VLAN he ordered between a specific LEX and the Service PoP to which he is connected.

~~31-33.~~ Proximus reserves the right to refuse orders if the volumes requested by the Beneficiary are not in line with reasonable market demands, i.e. in case of massive and unexpected orders of a Beneficiary that would paralyze the Proximus ordering system. In the event of such refusal, Proximus will provide the Beneficiary with the reason for the refusal and the Parties will enter into a good faith discussion for finding a solution to deal with the difficulty that has arisen.

6.2.2 Prerequisites

~~32-34.~~ The order is related to an existing Shared VLAN and must contain its correct identification. For detailed information on the information to provide, reference is made to the "MSO User Guide" document stored on the secured part of the Proximus wholesale website.

6.2.3 Ordering procedure

~~33-35.~~ The Beneficiary can ask to modify the existing parameters of a Shared VLAN through a firm order initiated via MSO. Orders will be considered as valid only when they are properly completed. In case data is missing or incorrect, the order will be submitted to the Beneficiary for correction or will be discarded. In the latter case, Proximus will indicate the discard reason in the Discard message. For detailed information on the ordering process, reference is made to the "MSO User Guide" document stored on the secured part of the Proximus wholesale website.

~~34-36.~~ In very exceptional situations, significant delays may be experienced:

- In case of periods of large demands that could not be foreseen,
- In an emergency situation (i.e. exceptional cases of *force majeure*).

In the event of such exceptional situations, a notice will be sent to the Beneficiary.

~~35-37.~~ When a Shared VLAN is modified by Proximus, the Beneficiary will be provided with all the necessary information in order to configure the related Shared VLAN at his side of the network.

6.3 Deactivation of Shared VLAN Transport ('Cease')

6.3.1 General

~~36-38.~~ The Beneficiary can request the deactivation of an existing Shared VLAN.

6.3.2 Prerequisites

~~37-39.~~ The order is related to an existing Shared VLAN and must contain its correct identification.

~~38-40.~~ A Beneficiary may only deactivate a Shared VLAN in a specific LEX once the service quality of this Shared VLAN is not offered anymore on any End-User of this Beneficiary in this LEX.

6.3.3 Ordering procedure

~~39-41.~~ The Beneficiary can ask the deactivation of a Shared VLAN through a firm order initiated via MSO. Orders will be considered as valid only when they are properly completed. In case data is missing or incorrect, the order will be submitted to the Beneficiary for correction or will be discarded. In the latter case, Proximus will indicate the discard reason. For detailed information on the ordering process, reference is made to the "MSO User Guide" document stored on the secured part of the Proximus wholesale website.

6.4 Amend Due Date and Cancel

~~40-42.~~ The Cancel and Standard Amend Due Date actions are possible on the orders for Shared VLAN transport. For detailed information on the ordering process, reference is made to the "MSO User Guide" document stored on the secured part of the Proximus wholesale website.

7 Ordering of Dedicated VLAN profiles

7.1 General

~~41-43.~~ There is no pre-provisioning of the Dedicated VLAN. The creation of each Dedicated VLAN is included in the process of provisioning a Bitstream Fiber GPON End-User line with Dedicated VLAN.

~~42-44.~~ Proximus configures each Dedicated VLAN at the moment of the implementation of the corresponding End-User line. The Beneficiary is responsible for choosing and defining the Dedicated VLAN profile and for providing the chosen specifications for each ordered product with Dedicated VLAN.

~~43-45.~~ For any demand of new Dedicated VLAN profile(s), the Beneficiary must specify to Proximus the number of profiles needed (in line with the rules on the number of profiles defined in the Bitstream Technical Specifications) and their attributes:

- Layer 2 (P-bit)
- P-bit
- Maximum Upstream bandwidth per P-bit
- Maximum Downstream bandwidth per P-bit

~~44-46.~~ Proximus will provide the Beneficiary with the monthly recurrent fees corresponding to the requested Dedicated VLAN profiles, in function of the applicable tariffs for the Ethernet transport with Dedicated VLAN.

~~45-47.~~ Conditional to the availability of sufficient resources for IT and Network implementation, the creation of additional profiles in the Proximus systems is expected to be executed within a guaranteed timeframe as defined below.

- For own profiles requested by :
 - a Beneficiary having concluded a Bitstream Fiber GPON contract more than 6 months ago : 1 month after reception of the firm request by Proximus;
 - a new Beneficiary : 6 months after the conclusion of a Bitstream Fiber GPON contract and reception of the firm request by Proximus, in the subsequent Proximus IT release at the earliest, or in any subsequent release.
- For common profiles : 6 months after approval of the new profiles by the Beneficiaries in the subsequent Proximus IT release at the earliest, or in any subsequent release.

7.2 Modification of a Dedicated VLAN profile

~~46-48.~~ The Beneficiary can request a change of the Dedicated VLAN profile of a specific Bitstream Fiber GPON line with Dedicated VLAN.

~~47-49.~~ A Dedicated VLAN profile modification shall be done through a firm order initiated via MSO. Orders will be considered as valid only when they are properly completed. In case data is missing or incorrect, the order will be submitted to the Beneficiary for correction or will be discarded. In the latter case, Proximus will indicate the discard reason. For detailed information on the ordering process, reference is made to the “MSO User Guide” document stored on the secured part of the Proximus wholesale website.

~~48-50.~~ Proximus reserves the right to refuse orders if the volumes requested by the Beneficiary are not in line with reasonable market demands. In the event of such a refusal, Proximus will provide the Beneficiary with the reason for the refusal and the Parties will enter into a good faith discussion for finding a solution to deal with the difficulty that has arisen.

~~49-51.~~ Prerequisite: the order is related to an existing Bitstream Fiber GPON line with Dedicated VLAN and must contain its correct identification. For detailed information on the information to provide, reference is made to the “MSO User Guide” document stored on the secured part of the Proximus wholesale website.

~~50-52.~~ In very exceptional situations, significant delays may be experienced:

- In case of periods of large demands at once that could not be foreseen,
- In an emergency situation (i.e. exceptional cases of *force majeure*).

In the event of such exceptional situations, a notice will be sent to the Beneficiary.

~~51-53.~~ When a Dedicated VLAN profile is modified by Proximus, the Beneficiary will be provided with all the necessary information in order to configure the related Dedicated VLAN at his side of the network.

8 Ordering of Single VLAN Transport

8.1 Activation of Single VLAN Transport ('Provide')

8.1.1 General

52-54. The Beneficiary will order bandwidth between each (TITAN) LEX in which the Beneficiary wants to connect End-Users and the Proximus Service PoP to which the Beneficiary is connected. Proximus does the set-up and the configuration of the Single VLAN in the LEX where the Beneficiary is present until the Beneficiary's equipment, on behalf of the Beneficiary. Each Beneficiary may order up to 2 VLANs per (TITAN) LEX.

53-55. Irrespective of the terms and conditions stated below, Proximus reserves the right to refuse orders if the volumes requested by the Beneficiary are not in line with reasonable market demands, i.e. in case of massive and unexpected orders of a Beneficiary that would paralyze the Proximus ordering system. In the event of such a refusal, Proximus will provide the Beneficiary with the reason for the refusal and the Parties will need to enter into a good faith discussion for finding a solution to deal with the difficulty that has arisen.

8.1.2 Prerequisites

54-56. An OLO Access Line with sufficient available capacity has to be implemented between a Proximus Service PoP and the Beneficiary's equipment. Single VLAN transport can only be ordered for End-User sites connected to a TITAN LEX.

8.1.3 Ordering procedure

55-57. The Beneficiary can order a Single VLAN through a firm order initiated via MSO. A firm order consists of the requested Single VLAN with its associated parameters (bandwidth per p-bit, service, OAL, ...). Orders will be considered as valid only when they are properly completed. In case data is missing or incorrect, the order will be submitted to the Beneficiary for correction or will be discarded. In the latter case, Proximus will indicate the discard reason in the Discard message. For detailed information on the ordering process, reference is made to the "MSO User Guide" document stored on the secured part of the Proximus wholesale website.

56-58. In very exceptional situations, significant delays may be experienced:

- In case of periods of large demands that could not be foreseen,
- In an emergency situation (i.e., exceptional cases of *force majeure*).

In the event of such exceptional situations, a notice will be sent to the Beneficiary.

57-59. When a Single VLAN is activated by Proximus, the Beneficiary will be provided with all the necessary information in order to configure the related VLAN at his side of the network.

8.2 Change of Single VLAN Transport ('Change')

8.2.1 General

~~58-60.~~ The Beneficiary can request, within the limits of the Single VLAN specifications mentioned in this offer (allowed Single VLAN Bandwidth in function of the service),

- an upgrade of the Bandwidth per p-bit of each Single VLAN he ordered between a specific LEX and the Service PoP to which he is connected;
- a downgrade of the Bandwidth per p-bit of each Single VLAN he ordered between a specific LEX and the Service PoP to which he is connected;

~~59-61.~~ Proximus reserves the right to refuse orders if the volumes requested by the Beneficiary are not in line with reasonable market demands, i.e. in case of massive and unexpected orders of a Beneficiary that would paralyze the Proximus ordering system. In the event of such refusal, Proximus will provide the Beneficiary with the reason for the refusal and the Parties will enter into a good faith discussion for finding a solution to deal with the difficulty that has arisen.

8.2.2 Prerequisites

~~60-62.~~ The order is related to an existing Single VLAN and must contain its correct identification. For detailed information on the information to provide, reference is made to the "MSO User Guide" document stored on the secured part of the Proximus wholesale website.

8.2.3 Ordering procedure

~~61-63.~~ The Beneficiary can ask to modify the existing parameters of a Single VLAN through a firm order initiated via MSO. Orders will be considered as valid only when they are properly completed. In case data is missing or incorrect, the order will be submitted to the Beneficiary for correction or will be discarded. In the latter case, Proximus will indicate the discard reason in the Discard message. For detailed information on the ordering process, reference is made to the "MSO User Guide" document stored on the secured part of the Proximus wholesale website.

~~62-64.~~ In very exceptional situations, significant delays may be experienced:

- In case of periods of large demands that could not be foreseen,
- In an emergency situation (i.e. exceptional cases of *force majeure*).

In the event of such exceptional situations, a notice will be sent to the Beneficiary.

~~63-65.~~ When a Single VLAN is modified by Proximus, the Beneficiary will be provided with all the necessary information in order to configure the related Single VLAN at his side of the network.

8.3 Deactivation of Single VLAN Transport ('Cease')

8.3.1 General

~~64-66.~~ The Beneficiary can request the deactivation of an existing Single VLAN.

8.3.2 Prerequisites

~~65-67.~~ The order is related to an existing Single VLAN and must contain its correct identification.

~~66-68.~~ A Beneficiary may only deactivate a Single VLAN in a specific LEX once the service quality of this Single VLAN is not offered anymore on any End-User of this Beneficiary in this LEX.

8.3.3 Ordering procedure

~~67-69.~~ The Beneficiary can ask the deactivation of a Single VLAN through a firm order initiated via MSO. Orders will be considered as valid only when they are properly completed. In case data is missing or incorrect, the order will be submitted to the Beneficiary for correction or will be discarded. In the latter case, Proximus will indicate the discard reason. For detailed information on the ordering process, reference is made to the "MSO User Guide" document stored on the secured part of the Proximus wholesale website.

8.4 Amend Due Date and Cancel

~~68-70.~~ The Cancel and Standard Amend Due Date actions are possible on the orders for Single VLAN transport. For detailed information on the ordering process, reference is made to the "MSO User Guide" document stored on the secured part of the Proximus wholesale website.

9 Ordering of an End-User Line

9.1 Introduction & Generalities

~~69-71.~~ A commercial contract is signed between an End-User and the Beneficiary.

~~70-72.~~ Pursuant to the General Terms and Conditions of the present offer, the Beneficiary is entitled to start the order entry via the MSO SOA ordering interface or via the MSO GUI ordering interface as described in the Annex “Business & Operational Support Systems for BRUO and Bitstream” of the BRUO reference offer.

~~71-73.~~ Prior to be allowed to use the MSO SOA interface, the Beneficiary has to be compliant with the security requirements defined in the “Security Addendum”. This document is available on the secured part of the Proximus wholesale website.

~~72-74.~~ To make use of the MSO GUI interface, each employee of the Beneficiary allowed to interact with Proximus Wholesale first needs to register online as described on the Proximus wholesale website.

~~73-75.~~ When the initial order is encoded in the MSO GUI, the Beneficiary has to indicate the email address(es) to be used for sending notifications regarding this order throughout its whole lifecycle up to its final status.

~~74-76.~~ The order entry process of a specific End-User line covers the activities of both the Beneficiary and Proximus, between the submission of an order to Proximus by the Beneficiary until the confirmation (Technical Order Confirmation message) or the discard of this order to the Beneficiary by Proximus.

~~75-77.~~ The order entry process can be split up in 4 main building blocks:

- ~~Pre-checks including the location, active installation and network feasibility checks, which allow the Beneficiary to get a clear view on the address, installation and [Proximus-Fiber Access](#). Network configuration prior to submitting an End-User line order to Proximus. The pre-checks also include the Demand Bundling (campaigning) process preceding the fiber roll-out in some of the JV deployment areas and aiming to stimulate market interest in order to maximise the number of “Home Terminated” and to facilitate the conclusion of a fiber service contract with the End-Users from the outset.~~
- Order entry including the product options and specifications requested by the Beneficiary.
- Technical Situation Allocation including the minimum installation method required to proceed further with the request of the Beneficiary.
- Appointment (date + timeslot) booking.

~~76-78.~~ For detailed information on the order entry process, reference is made to the “MSO User Guide” document stored on the secured part of the Proximus wholesale website.

9.2 Pre-Checks

~~77-79.~~ During the pre-checks phase, the Beneficiary will be able to perform the following checks:

- **Location Check:** determination and validation of the installation address. It is mandatory for Provide, Change Operator, Swap Telco and Move orders. The search based on the service identifier or Fiber PON installation point ID (~~i.e. whether specified by the~~ UTAC and UNI or only the UTAC) will provide the most reliable and precise installation address information.
- **Active Installation Check:** providing the Beneficiary with information on whether or not an active service is present ~~or not towards the Beneficiary~~ for the given address, to help select the correct order action type and the correct detailed address. This step will allow confirming or changing the detailed address.
- **Change of the detailed address:** adding, changing or removing address details (i.e. box, floor, apartment or block number) linked to the address.
- **Network Feasibility Check:** providing the Beneficiary with network and product information ~~towards the Beneficiary for the given address, including availability status and technical information needed by the Beneficiary in order~~ to select ~~the a network/~~ technology and, ~~where applicable, to have an overview of a view on the fiber access owner (Proximus or JV name), the fiber zone (FTTH Greenfield, FTTH Brownfield, FTTH Brownfield JV, ...)~~ and the potential UTAC(s) (if no Proximus ONT installed yet) or installation point(s) (IP) UTAC/UNI for delivering the Bitstream Fiber PON service to the End-User, along with the network availability and technical information.
- **Demand Bundling Process:** this campaigning process is integrated in the Pre-Checks in order to allow the Beneficiary to claim an address – in the concerned JV deployment areas – for which the said Beneficiary intends to conclude a fiber service contract with the End-User.

~~78-80.~~ All The pre-checks results depend on the user profiles (i.e. the right to get some network / technology / product information) and the predesign of the Fiber Access Network (i.e. whether or not the predesign is performed up to the Living Unit). On the JV footprints, the Bitstream Fiber PON service will only be feasible (and orderable) at Living Unit level.

~~79-81.~~ After finalization of the mandatory step (if any) in the pre-check phase, the Beneficiary has the possibility to go for ordering.

~~80-82.~~ For further details on the pre-checks phase, reference is made to the “MSO User Guide” documented on the secured part of the Proximus wholesale website.

9.3 Order Action Types

~~81-83.~~ An order action on a Bitstream End-User-Line or an action on the order itself can be:

a) **Created by the Beneficiary**

- i. Provide: request for activation of a new product or service including the pre-checks.
- ii. Cease: request for de-activation of an existing product or service.
- ~~iii.~~ iii. Change Operator: request for activation of a new product or service, which requires a cease of the End-User's active service/installation with another Beneficiary (Proximus included).
- ~~iii-iv.~~ iv. Swap Telco: request for takeover of the broadband service active on the JV network from Owner Telco x to Owner Telco Proximus and Beneficiary. The Owner Telco x is a telecom operator being the owner of the OLT-ONT active components and having initiated the activation of the broadband service on the JV network and having the broadband service present in his installed base.
- ~~iv-v.~~ v. Change: request for a modification of an active service within the same root product.
- ~~v-vi.~~ vi. Migrate : request for modification of an active product or service to a new root product.
- ~~vi-vii.~~ vii. Move: request for move of an active product or service to a new installation address. Within the move a change/migrate of the product or service is allowed.
- ~~vii-viii.~~ viii. Amend Due Date: request to update the appointment date and timeslot of a pending order in the provisioning phase. The Amend Due Date is not allowed before the Technical Order Confirmation (TOC) and after the Technically Executed (TEX) messages.
 1. 4 types of Amend Due Date can be used by the Beneficiary:
 - a. Standard Amend Due Date
 - b. Rush Amend Due Date: see conditions at the end of this section.
 - c. Escalation Amend Due Date: see conditions at the end of this section.
 - d. Plan Not Received Amend Due Date: accepted only if the planned installation method "with customer visit splicing included" can be rescheduled sooner when plans have been received by Proximus after the prior "Street plans not received" message.
 2. 4 types of Amend Due Date weight are possible:
 - a. Light : applicable for the Standard Amend Due Date when the request is performed at least before 12 p.m. of the working day preceding the Appointment Date.
 - b. Heavy : applicable for the Standard Amend Due Date when the request is performed after 12 p.m. of the working day preceding the Appointment Date.
 - c. Free: applicable for the Plan Not Received Amend Due Date and Escalation or Standard Amend Due Date following an appointment missed by Proximus or JV.
 - d. Rush: applicable for the Rush Amend Due Date as described in the conditions at the end of this section.
- ~~viii-ix.~~ ix. Amend Technical Remark: request to update the remark text for the technician to facilitate the installation at End-User's premises of a pending order in the provisioning phase.

- ~~ix-x.~~ Amend End-User Contact: request to update the End-User contact name and contact phone number on site (preferably a mobile number) of a pending order in the provisioning phase.
- ~~*xi.~~ Amend Product: request to update the product options and/or profile of a pending order in the provisioning phase.
- ~~*i-xii.~~ Upgrade Installation Method: request to upgrade the minimum installation method before the Technical Order Confirmation. Such action is allowed on “provide-like” and “change” orders (when applicable).
- ~~*ii-xiii.~~ Cancel: request for cancellation of a started order during the order entry or the provisioning phase, which is allowed until the Technically Executed status. Two types of Cancel weight are possible: Light and Heavy.

b) **Created by Proximus (due to an action of another Beneficiary or the End-User)**

- i. An auto-order is an order automatically created by Proximus and sent to the Beneficiary as a result of another order impacting the active product or service of this Beneficiary for the same End-User at the same installation address. When a Beneficiary or Owner Telco x requests to take over the broadband service of Beneficiary y, Proximus will create an order with order type AUTO cease (change operator or swap telco) to inform Beneficiary y that its broadband service will be ceased.

For detailed information on the notion of root product, reference is made to the “Product Modelling User Guide” document stored on the secured part of the Proximus wholesale website. For further details on the order entry process, reference is made to the “MSO User Guide” also documented on the secured part of the Proximus wholesale website.

Rush Amend Due Date : conditions

82-84. “Rush Amend Due Date” is an amend due date type requesting the delivery of a line in minimum 3 working days and maximum 5 working days (subject to the conditions of the points below).

83-85. “Rush Amend Due Date” is subject to all conditions of regular provisioning, including the presence of the required connectivity to the Proximus-Fiber network before ordering.

84-86. “Rush Amend Due Date” is only possible on orders with an appointment date in the future.

85-87. “Rush Amend Due Date” will be always during working hours.

86-88. “Rush Amend Due Date” is offered as a service when resources can be found to perform the necessary tasks. In case the Proximus and/or JV Technician cannot perform the works in the requested timeframe, Proximus will continue the provisioning as a default order and inform the Beneficiary.

87-89. Any delay for a “Rush Amend Due Date” put in place by Proximus, for instance caused by the absence of the End-User on the Beneficiary requested date, will entitle Proximus to charge the Beneficiary with 50% of the “Rush Amend Due Date” fee. In any case the process will continue and a new Beneficiary requested date will be settled in accordance with the default procedures.

~~88-90.~~ The Beneficiary is able to request a rush order by the use of an “amend due date - type Rush” through the MSO interface (GUI or SOA). If the “Rush Amend Due Date” has been accepted, Proximus will provide the Beneficiary with the new appointment date in the “amend due date confirmation message”. If the rush order is not possible, the “Rush Amend Due Date” will be discarded and the initial appointment date will be kept.

~~89-91.~~ Per line for which “Rush Amend Due Date” is requested and offered, the “provide-like” fee is doubled.

~~90-92.~~ Per line for which “Rush Amend Due Date” is requested but cannot be achieved by Proximus for a reason attributable to the latter or the JV company, the standard fee is billed.

~~91-93.~~ “Rush Amend Due Date” requested for “overrun orders” will be discarded.

Escalation Amend Due Date : conditions

~~92-94.~~ An “Escalation Amend Due Date” can be requested in case of a Proximus or JV fault (e.g. Missed Appointment by a Proximus or JV Technician).

~~93-95.~~ “Escalation Amend Due Date” is only possible on orders with an appointment date in the future.

~~94-96.~~ Escalations requested for “overrun orders” will be discarded.

~~95-97.~~ An escalation order has no additional cost.

9.4 Types of Messages

~~96-98.~~ During the order entry and provisioning processes, the Beneficiary will receive various messages. Depending on the type of order and/or the type/number of messages, the order entry can be temporarily put on hold or stopped. Three types of messages are possible:

- Message for Action: message to ask the Beneficiary to realize a precise action on a pending order to re-start the flow.
- Message for Information: message sent to communicate intermediate or final information to the Beneficiary.
- Discard Message: message to inform the Beneficiary that the order entry or provisioning is stopped.

The above types of messages are further explained below and described in detail in the “Message versus action” sheet stored on the secured part of the Proximus wholesale website.

9.5 Message for Action

~~97.99.~~ A Message for Action can be sent by Proximus during the order entry or the provisioning phase to inform that the order is temporarily put on hold as an action is required from the Beneficiary to re-start the flow (e.g. via an Appointment Booking after the “Report Work Orders” message).

~~98.100.~~ During the order entry the number of Messages for Action, due to an invalid input provided by the Beneficiary, will be limited to 3.

~~99.101.~~ A logic of auto-cancel after 12 calendar days will be applicable.

~~100.102.~~ For complete information about all possible Messages for Action, reference is made to the “MSO User Guide” and the “Message versus action” sheet, which can be retrieved from the secured part of the Proximus wholesale website.

9.6 Message for Information

~~101.103.~~ A Message for Information can be sent by Proximus to inform the Beneficiary on the status of an order and/or on any event occurring on an order or an installed line. The following Messages for Information are notably distinguished:

- Technical Order Confirmation (TOC): the TOC message is sent to the Beneficiary once the appointment is confirmed and contains information on the installation (service identifier, installation address, appointment date, installation method, ...).
- Due Date Confirmation: Proximus will use the notification with Subject “Due Date Confirmation” to report the fact that the Due Date of an order of type AUTO has been changed.
- OLO-tic (information on orders with End-User visit): the OLO-tic is sent after an End-User visit. Based on the situation encountered by the Proximus or Partner Technician, a specific template is filled in to give evidence of the visit and provide useful information. The possibilities are:
 - i. Negative closure during IBK (“Ik Bel de Klant” call),
 - ii. Negative closure at End-User’s premises,
 - iii. Positive closure.
- Technically Executed (TEX): message to indicate that the service is technically activated or deactivated, whether after a remote configuration in case of the installation method “remote” or after a technician intervention. In the latter case, the technician has performed a positive closure of the work order(s). However, administrative tasks have still to be performed in the Proximus systems at this stage of the order lifecycle. The TEX message indicates an intermediate status of the order.

- Order Closed (OC): message to indicate that all the technical and administrative tasks have been successfully performed. The order is no longer pending in the Proximus systems. This message indicates the final status of the order.
- Temporarily Impossible: message to inform that the delivery is temporarily impossible. Whenever Proximus has additional information (e.g. planned dates, reason of temporarily impossible) it will be provided in the message towards the Beneficiary. As a result of a message "temporarily impossible" 2 options are possible:
 - The order becomes technically possible: a Message for Action to perform a new appointment booking will be triggered towards the Beneficiary;
 - The order finally becomes technically impossible: a Discard message is triggered towards the Beneficiary.
- Amend Confirmation with the reason "Due date rescheduled on OLO request by call / e-mail" : message triggered when the Beneficiary has requested towards Proximus to perform a manual appointment rebooking instead of using the amend functionalities.
- Installation Address Changed: message to notify a change in the installation address. This message will contain the old and the updated address. The update of the installation address can occur at 2 different stages during the order lifecycle:
 - When the technical services have performed a manual TSI (Technical Situation) assignment;
 - When the technician is on site and requests the technical services to change the installation address because it doesn't exactly match the actual installation address. This is only possible if there is no impact on the main address.
- NPEXEC Trigger: message to inform the Beneficiary that he can perform the EXEC for a Number Portability request.
- Technical Situation Reallocation: message to indicate that the Due Date of an order has been successfully changed after a new allocated technical situation.
- Street Plans received: message to inform the Beneficiary that the plans are available at Proximus for orders with the installation method "with customer visit splicing included".

102.104. For complete information about all possible Messages for Information, reference is made to the "MSO User Guide" and the "Message versus action" sheet, which can be retrieved from the secured part of the Proximus wholesale website.

9.7 Discard or Cancel Confirmation Message

103.105. Similarly to the Order Closed message, a Discard or a Cancel Confirmation message indicates a final status of an order (Discarded or Cancelled). The Discard or the Cancel Confirmation message informs the Beneficiary that the order entry or provisioning is

stopped, which means that the order has not been executed. The Discard message is for example sent when it is not possible for Proximus to succeed in providing the service based on the existing infrastructure or when the Beneficiary has submitted an incorrect order. The Discard message contains the appropriate discard reason.

~~104~~106. Proximus reserves the right to refuse orders if the volumes requested by the Beneficiary are not in line with reasonable market demands. In the event of such a refusal, Proximus will provide the Beneficiary with the reasons for the refusal and the Parties will enter into a good faith discussion for finding a solution to deal with the difficulty that has arisen.

9.8 Order Status Check

~~105~~107. The Beneficiary is able to perform an order status check in the Order status viewer in the MSO GUI.

~~106~~108. When an order is subject to a new order status, the message related to the order status change will contain the new order status.

~~107~~109. The exhaustive list of the order statuses is present in the “MSO User Guide” which can be retrieved from the secured part of the Proximus wholesale website.

9.9 Functionalities during the Order Entry

~~108~~110. ~~When applicable and relevant, the~~ Beneficiary is entitled to provide different values which will trigger a different handling of the order in the ordering and/or provisioning flows. The values can be:

- Fictitious address such as antennas or event lines.
- Manual TSI request towards Proximus ~~at a fixed price~~, e.g. in case the End-User’s building is served by multiple introduction fibers as indicated in the pre-checks phase.
- Renovated House to inform Proximus that the introduction fiber is no longer suitable and that an installation method “with customer visit splicing included” is required.
- New Building to inform Proximus that the introduction fiber is not present and that an installation method “with customer visit splicing included” is required.
- Project based ordering: an agreement is made between the Beneficiary and Proximus to start a specific project for which the terms and conditions (including the pricing) have been discussed and concluded on beforehand. Reference is made to the Annex K of the BRUO reference offer for further details on the project based ordering approach used in the context of customized migrations.

- SNA (Small Network Adaptations): in case the Beneficiary indicates as input “not allowed” and the minimum installation method required to perform the activation of the End-User line is “with customer visit splicing included”, the order will be discarded.
- Partner Splicing: in case (i) the Beneficiary indicates as input “required” and (ii) splicing tasks to be executed by Proximus are detected, the splicing, in-house installation and activation of the Beneficiary services towards the End-User will be merged in one visit. Note that in case the Beneficiary indicated as input “SNA not allowed” together with a request for a one-visit installation, the order will be put on hold for incompatibility reasons and a Message for Action will be sent to invite the Beneficiary to correct the order. Pay attention that in order to use this functionality, an agreement between the Beneficiary and the relevant field installation partner has to be concluded to be able to execute Beneficiary specific installation activities at End-User’s premises. The list of the possible subcontractors is documented in the “MSO User Guide”. Their regional coverage is documented on the Personal Page. This information can be requested by the Beneficiary to its Proximus SPOC.
- Cost estimate: in case work by splicers on the private domain is required, a quotation will be performed and invoiced towards the Beneficiary. If the latter indicates as input “not allowed” the order will be discarded and the quotation will not be performed nor invoiced.
- (O)NTP (Optical Network Termination Point): in case the Beneficiary indicates as input “missing” (the ONTP being not present or no longer usable), a customer visit with splicing included, entailing the placement and labelling of the ONTP, will be required to perform the activation of the End-User line.
- Contact data: the Beneficiary is able to use 4 types of contact data, i.e. the End-User contact (mandatory in all “provide-like” orders and aiming at providing a contact point at End-User side to be used by the technician before the visit), the “SARA SMS” (optional and aiming at requesting Proximus to inform the End-User of the appointment by use of an SMS), the Beneficiary contact (optional and aiming at providing the technician with a contact point at Beneficiary side) and the Beneficiary ISP (optional and aiming at providing the technician with the brand name of the ISP the order is placed for).
- NP Synchro: to enable synchronisation of a fixed Number Portability request towards Proximus and a Provide or Change Operator order.

109.111. Given the early stage of the fiber roll-out, it is possible that some of the above-mentioned values will be ignored during the fulfillment of the order. This is in particular true for orders placed on an address located in a JV footprint and for which splicing tasks must be executed by the concerned JV: any input from the Beneficiary in this regard such as e.g. “Partner Splicing required” will be ignored during the fulfillment of those orders. For detailed information about these possible values, reference is made to the “MSO User Guide” which can be retrieved from the secured part of the Proximus wholesale website. When applicable, reference is also made to the Annex “Pricing, Compensations & Billing”.

10 Provisioning of an End-User Line

10.1 Introduction & Generalities

~~110-112~~ The provisioning process of a specific End-User line covers the activities of both the Beneficiary and Proximus as well as the concerned JV (when applicable) as from the Technical Order Confirmation (TOC) message sent by Proximus to the Beneficiary until the closure of the order as communicated by Proximus through the Order Closed (OC) message.

~~111-113~~ After the Technical Order Confirmation message :

- a. The following **field interventions** will be performed by a Proximus JV or Partner Technician, when allowed and requested by the Beneficiary through MSO (GUI or SOA):
 - i. The realization of the necessary (de-)patching works in the JV PoP (JV ownership) when applicable. A Swap Telco order action for example will require both de-patching and patching tasks in the JV PoP. To avoid any risk of PON saturation / light issues, a cease-like order (cease, swap telco auto-cess, move out, ...) on the JV footprints will immediately trigger a de-patching request towards the JV company when a Proximus fiber service is ceased on the hybrid JV-Proximus infrastructure.
 - ii. The installation at End-User's premises: (a) fibre splicing including the installation of the ONTP (termination works by Proximus or JV) and/or (b) installation and configuration of the ONT as well as delivery and placement of an optical patch cord between the ONT and the ONTP (activation works by a Proximus or Partner Technician),
 - iii. The end-to-end testing of the End-User line.
- b. The following **remote interventions** will be performed by Proximus:
 - i. The realization of the necessary documentation to track that the End-User line of the Beneficiary carries the required technology,
 - ii. The remote configuration of the End-User line,
 - iii. After the Technical Execution of the order (TEX message), the sending of an Order Closed message.

10.2 Installation Methods (IM)

~~112-114~~ After the order entry validation, Proximus will return to the Beneficiary the minimum installation method required to perform the activation of the End-User line when no installation method had been given by the Beneficiary as initial input.

~~113-115~~ A downgrade of the installation method (by Proximus or by the Beneficiary) is not allowed.

~~114-116~~ Three (3) installation methods are possible for Bitstream Fiber PON orders in MSO in function of the successful technical situation allocation and work order creation:

- Remote

- i. No work to perform by a Technician in the field
 - ii. No work to perform by a Technician at End-User's premises
 - iii. Remote configuration to perform
 - iv. Upgrade of the installation method is possible
- With Customer Visit
 - i. Work to perform by a Technician in the field (on JV footprints only)
 - ii. Work to perform by a Technician at End-User's premises
 - iii. Remote configuration to perform
 - iv. Upgrade of the installation method is not possible
 - v. Can be requested upfront in the order
- With Customer Visit Splicing included (i.e. including Small Network Adaptations or termination works)
 - i. Work to perform by a Technician or Splicing team in the field (on JV footprints only)
 - ii. Work to perform by a Splicing team at End-User's premises
 - iii. Remote configuration to perform
 - iv. Upgrade of the installation method is not possible

Small Network Adaptations

115-117. Small Network Adaptations (SNA) are splicing or termination works usually performed during provisioning activities in case no suitable Introduction Fiber is available.

116-118. An Introduction Fiber, also referred to as drop wire, is defined as the physical part of an End-User line that connects the Distribution Fiber to the End-User's Optical Network Termination Point (ONTP) or Building Distribution Frame Optical (BDFO) used in some SDUs. The termination works for a Living Unit of an MDU relate either to the part between the floorbox and the Living Unit (mainly for large MDUs) or to the part between the BDFO and the Living Unit (mainly for small MDUs).

119. The unavailability of a suitable Introduction Fiber means that an Introduction Fiber is not present or is not usable as such due to e.g. damage caused by the End-User or a Third Party (whether at introduction or distribution level), renovation works by the End-User, ...

117-120. JVs are responsible for the SNA works aiming at connecting the homes/businesses on their respective footprint.

118-121. In case Small Network Adaptations are needed on the Proximus footprint, the provisioning of a Bitstream Fiber PON service may entail the following works requiring fibre splicing skills:

- Outdoor works:
 - outdoor underground connection from the DTP-X to the ONTP for an SDU;
 - outdoor façade connection from the DTP-F to the ONTP for an SDU;
 - outdoor façade connection from the DTP-F to the ONTP for an MDU;
- Indoor works for an MDU:
 - internal cabling from the BDFO to the ONTP (mainly small MDUs);
 - internal cabling from the floorbox to the ONTP (mainly large MDUs).

- A combination of outdoor façade and indoor cabling works can be executed in some exceptional cases.

~~119.122.~~ The installation and the measurement of the ONTP are part of the termination works executed by Proximus splicers (employees or subcontractors).

~~120.123.~~ The DTP-X (Distribution Termination Point) is the place on the public domain where the Introduction Fiber is spliced onto the Distribution Fiber. It is a small buried box normally accessible with a lid at the same height as the footpath. The Introduction Fiber is pulled in a subduct from the SDU until the DTP-X and is spliced at that level.

~~121.124.~~ More specifically, the underground splicing or termination works to be executed in order to connect the Introduction Cable of an SDU to the Proximus Fiber PON network can be described as follows:

- installation of a subduct in an existing free duct on private domain between the SDU and the SRV tube that lays at the level of the footpath;
- installation of the ONTP (incl. labelling of the UTAC-code), which is the first connection point in the SDU and is thus connected to the optical fiber Introduction Cable;
- digging a pit;
- pulling fiber into the subduct from the ONTP to the DTP-X;
- splicing the Introduction Cable in the DTP-X;
- measure of the line.

~~122.125.~~ Such SNA require that a free duct or an open trench is available on the private domain. If neither a free duct nor an open trench is available on the private domain, Proximus can be asked to also perform this part of the work (or have it performed) on condition that the Beneficiary agrees to pay the price for that part of the work performed by Proximus or Proximus' Third Party. This price will be determined on a case-by-case basis according to a cost estimate if the Beneficiary allows it.

~~123.126.~~ In this regard, it is to be noted that SNA and additional works on private domain in non-standard conditions such as those encountered in the FTTB zones and in the least accessible and least densely populated JV zones always require a site survey and the creation of a cost estimate.

~~124.127.~~ As already mentioned above, splicing or termination works can also be executed on the façade (for both an SDU and a Living Unit of an MDU). The DTP-F (Distribution Termination Point Façade) is a distribution box placed on the façade where the Introduction Fiber is spliced onto the Distribution Fiber.

~~125.128.~~ The splicing or termination works to be executed in an MDU require the approval of the syndic/owner of the building for the internal fiber cabling.

~~126.129.~~ The Belgian Regions created platforms (i.e. OSIRIS in Brussels, GIPOD in Flanders and POWALCO in Wallonia) where, among others, the splicing works to be executed by the JVs or Proximus (employees or subcontractors) on the public domain must be registered. The main goal of these platforms is to coordinate the works of the multiple utility companies on the public domain as well as to manage the authorisation process and the work

acceptance with municipalities. Such process imposed by the Public Authorities can extend the time needed for the provisioning of the End-User lines.

~~127.130.~~ The provisioning time can also be extended because Proximus and the JVs are ~~is~~ legally obliged to get via the KLIM or KLIP portal the plans of the other utility companies before starting the underground splicing works. For example, in virtue of the article 192/2 of the RGIE/AREI and in order to ensure the security of Proximus splicers and other individuals, Proximus splicers must consult the plans of the underground electric cables installed by the other utility companies before carrying out any new connection with splicing works. Street plan request obligations are also applicable for the underground cables of any other relevant utility company (e.g. gas) in virtue of sector specific legislation.

~~128.131.~~ SNA are always performed by Proximus or a JV or a Third Party working for ~~Proximus the latter.~~

~~129.132.~~ The Beneficiary has the possibility to indicate as input in the order entry "SNA not allowed". If "SNA not allowed" is flagged in the order, Proximus will discard the order. The use by the Beneficiary in its order of the SNA indicator "not allowed" is not compatible with specific indications on the Introduction Fiber by means of the values "New Building", "Renovated House" or "Manual TSI".

~~130.133.~~ In case an SNA is detected during provisioning, Proximus will send to the Beneficiary a Message for Action (with subject "on HOLD") mentioning that an additional intervention is needed. If the Beneficiary answers that message with the amend functionality, the new minimum installation method required "with customer visit splicing included" will be mentioned in the Proximus answer with the related work order(s). The Beneficiary still has at that moment of the "Report Work Orders" Message for Action the possibility to cancel the order.

~~131.134.~~ The construction or trenching of new Distribution cabling, another DTP than the one designed by Proximus engineering or new Feeder cabling is outside the scope of the present offer.

10.3 Technician Types

~~132~~135. The Beneficiary is able to select one of the ~~2~~3 following technician types when the installation method requires an intervention to be performed by a technician:

- Proximus Technician
- ~~133~~136. Partner Technician: the selection of this type of technician requires on beforehand the conclusion of a contract between the Beneficiary and one of the possible Proximus subcontractors. The list of the possible subcontractors is documented in the “MSO User Guide” and can be requested by the Beneficiary to its Proximus SPOC.
- JV Technician: this technician type is only applicable in support of the installation of a Bitstream Fiber PON service on the passive network of a JV (up until the ONTP).

~~133~~136. When returning the work order(s) towards the Beneficiary, the technician type(s) that are allowed to be selected will be added per work order. For each work order describing technician tasks a technician type is required as input. Note that in the very early stages of the Fiber XGS-PON deployment, the Partner Technician type (as well as the Partner Splicing functionality as described in Chapter 9) will not be possible for XGS-PON orders. The Beneficiary will benefit from these functionalities as soon as the Proximus subcontractors have the skills and necessary hardware to execute XGS-PON orders.

~~134~~137. A change of technician type can be needed due to a change of the allocated TSI, resulting in the creation of (a) new work order(s).

10.4 End-User Appointment negotiation and (re)booking

~~138~~139. Based on the input of his End-User (“appointment negotiation”) and when applicable, the Beneficiary is requested to perform date and timeslot booking for each work order to be performed.

~~139~~140. For instance, it is possible that, in the very early stages of the Fiber XGS-PON deployment, multiple work orders are reported in the “Report Work Orders” notification, i.e. one work order for the splicing tasks and another work order for the installation and configuration of the XGS-PON ONT: in such case, the Beneficiary will request available timeslots per work order and perform appointment booking for both work orders.

~~135~~140. For orders placed on an address located in a JV footprint, it is also possible that multiple work orders are reported in the “Report Work Orders” notification, i.e. one work order containing the JV tasks and one work order containing the Proximus tasks. In such case, a flag called “Installation Buffer” will be included for the Proximus work order in the “Report Work Orders” notification in order to respect the required buffer between the execution of the JV work order and the execution of the Proximus work order.

~~136.141.~~ The Beneficiary is responsible to make sure the appointment date fits his End-User well and to reschedule it if needed. Proximus will only contact the End-User approximately 30 minutes before ~~its~~^{the} intervention to confirm that the technician (or splicing team) is coming ("IBK call" – "Ik Bel de Klant").

~~137.142.~~ Through the optional "SARA SMS" functionality, the Beneficiary has the possibility to request Proximus to send an SMS to the End-User during the provisioning process in order to inform the latter of the appointment with Proximus technical staff (employees or subcontractors).

~~138.143.~~ Note that in the early stages of the fiber roll-out by the JVs, it will not always be possible to schedule work orders on the JV network using the appointment negotiation process, hence the introduction in MSO of a new "Scheduling Allowed" flag (with values Y/N). The work orders for which scheduling will not be allowed will be executed within a predefined timeframe by the JV, who will contact the End-User in order to schedule the appointment for network termination in the Living Unit. For more details about this way of working as well as about the date/timeslot negotiation and booking process, reference is made to the "MSO User Guide" which can be retrieved from the secured part of the Proximus wholesale website.

11 Ordering and Provisioning Process flows

~~139.144.~~ Reference is made to the Process Flows describing the Ordering and Provisioning Business Processes of the Bitstream offer, which can be retrieved from the secured part of the Proximus wholesale website in the section “Operational Documentation” of the Regulated Services menu.

12 Forecasting of orders

~~140-145.~~_____ The forecasted volumes (provide, change operator/~~swap telco~~, change, migrate and move included) are established by sub-area/area and ventilated per Installation Method ("with customer visit" or "with customer visit splicing included" for Bitstream Fiber PON), all products (Bitstream and BRUO) combined. Bitstream Fiber PON orders with the technician type "Partner Technician" are not taken into account in the forecast.

~~141-146.~~_____ The forecasting of orders shall be done in conformance with the procedure as described in Appendix B.

13 Incident Management and Repair

~~142~~147. This section describes the responsibilities of Proximus and the Beneficiary in incident management and repair.

13.1 General Process

~~143~~148. Repairs are carried out on the Proximus ~~and/or JV~~ Network after the Beneficiary has reported an incident to Proximus provided the Beneficiary has made the preliminary investigations and is confident that the incident is in the Proximus ~~or JV~~ Network. The Beneficiary is responsible for the repair of the PON service for which he has the control and is responsible to filter out all non-Proximus ~~JV~~ related incidents. The Beneficiary, when reporting that there is an incident, has to give precise information about the nature of the incident. Proximus will, when appropriate, confirm the existence of the incident.

~~144~~149. If Proximus becomes aware of an incident on its network ~~or the JV network~~, Proximus automatically coordinates the necessary actions ~~to resolve so that~~ the incident ~~is resolved~~ according to the applicable arrangements.

~~145~~150. The maintenance and the development of the ~~Proximus-Fiber~~ Network may require Proximus to limit the Bitstream Fiber PON Service or to suspend it temporarily. Proximus undertakes to limit the duration of this period to the time that is required for the execution of the Planned Work and that duration will, in no way, be longer than the period that Proximus would require if its own services needed to be suspended. In such cases, Proximus will inform the Beneficiary in due time at least 48 hours in advance, and communicate the estimated suspension time and the reason of suspension.

~~146~~151. For detailed information on the Incident & Repair Management Platform, reference is made to the Web GUI (Portal) User Guide and SOA IT Package stored on the secured part of the Proximus wholesale website.

13.2 Points of Entry for reporting an incident

~~147~~152. For the reporting of incidents, several modes of contact between the Beneficiary and Proximus are possible.

For the reporting of incidents at End-User line level, the following modes of contact are available:

- Via the Incident & Repair Management Platform enabling to create a repair case;
- By call (0800 93122) or by e-mail (080093122@proximus.com) should the Incident & Repair Management Platform not be up and running.

For the reporting of incidents at OLO Access Line level, the Incident & Repair Management Platform for repair cases is also available. Should this platform not be up and running, it is

possible to report an incident by call (0800 14888) or by e-mail (ict-servicedesk@proximus.com).

For the reporting of incidents at Shared or Single VLAN level towards the ICT Service Desk, the phone number is 0800 91480.

13.3 Incident Reporting

~~148.153.~~ It is always the Beneficiary that

- 1) reports incidents affecting the Bitstream Fiber PON Service;
- 2) receives and handles own End-Users' incident reports before reporting some of those incidents to Proximus. Proximus will not take calls directly coming from End-Users of the Beneficiary for the Bitstream Fiber PON Service.

~~149.154.~~ It is the Beneficiary's responsibility to launch diagnose tasks using the DARE Pre-Troubleshooting functionality put by Proximus at his disposal and check that there is sufficient ground to establish that the incident is within Proximus or JV area of responsibility. The Beneficiary will be informed through the Pre-Troubleshooting results whether the Bitstream Fiber PON service is connected on a JV network.

13.4 Beneficiary's liabilities in connection with incident reporting

~~150.155.~~ For the reporting of incidents at End-User line level, the Beneficiary will contact Proximus:

- via the Incident & Repair Management Platform, as standard solution or,
- by phone or e-mail, as back-up solution. The phone number to be used by the Beneficiary is 0800/93122 while the e-mail address is 080093122@proximus.com. The Beneficiary will send to this e-mail address an Excel file with the description of the incident.

~~151.156.~~ Before creating a repair case or triggering any recovery actions through the Proximus Incident & Repair Management Platform, the Beneficiary will execute via this platform a line test to ensure that the incident is attributable to Proximus or JV. The applicable diagnose tasks and pre-troubleshooting tests (DARE) are proposed by Proximus and are mandatory: for a Bitstream line, the Beneficiary is provided with the test results, a diagnosis as well as additional information (if any) such as a potential network incident impacting the line or a repetitive repair on the same line.

~~152-157~~ The Beneficiary is responsible for transmitting all necessary information requested by Proximus. The following information will be included in the repair case (or in the Excel file if applicable) based on the forms available in the Incident & Repair Management Platform:

- Service identifier
- Technical contact points and phone numbers of the Beneficiary
- Is service fully interrupted (P1) or degraded (P2 or P3)?
- Synchro status
- Ethernet connectivity status (interrupted/degraded) between the ONT and Service Box
- Quality IP (packet lost down, packet lost up,...)
- End-User installation info

~~153-158~~ In the following cases the repair case creation will be rejected:

- Diagnose task is invalid
- Information in the repair case (or in the Excel file if applicable) is incomplete
- More than one case is sent in the incident report

~~154-159~~ In addition, the Beneficiary will possibly communicate to Proximus:

- Measurements from equipment on the Beneficiary's side that can help solve the incident (if available).
- Installation address of the line (optional if the intake is done via the Incident & Repair Management Platform).
- Contact point, phone number, language and availability of the End-User (in case an intervention is required at End-User's premises).
- Any information that shows that Beneficiary has taken the necessary steps to ensure that the repair case (or Excel file) is submitted in good faith to Proximus.

~~155-160~~ The transmission of test results by the Beneficiary is optional but in case the latter provides such information to Proximus, the following information is useful:

- Confirm if the ONT and Service Box are powered on.

~~156-161~~ It is always the Beneficiary who receives own End-Users' incident reports regarding the PON services before reporting some of those incidents to Proximus. In case Proximus receives such incident reports from a Beneficiary's End-User, Proximus will refer the End-User to the Company with whom he has signed an agreement.

~~157-162~~ When the Beneficiary receives an incident report from one of his End-Users for a PON service, the Beneficiary performs a first diagnosis using notably the information provided by the End-User as well as the diagnosis and line test results returned by Proximus as part of the DARE Pre-Troubleshooting functionality.

- In case the issue does not require a Proximus intervention (e.g. the Beneficiary chooses to trigger a recovery action as suggested by the DARE Pre-Troubleshooting functionality), the Beneficiary manages the issue and contacts the End-User once the issue is solved and closed.
- On the opposite, if the issue requires a Proximus or JV intervention (typically for network issues), the Beneficiary continues the issue resolution process with Proximus.
- In case an on-site intervention is needed by a Proximus technician, the Beneficiary will book an appointment for its End-User through the Incident & Repair Management Platform. Should an intervention by a JV technician be needed because a splicing issue on the JV passive network is suspected by the Proximus technician, a new work order will be created on the existing repair case for the JV company. In the early stages of the fiber roll-out by the

JV, it may not be possible for the Beneficiary to book the appointment on a JV work order through the Incident & Repair Management Platform. In such case, the Beneficiary will be informed through the Incident & Repair Management Platform about the appointment booking made with its End-User by the JV company (or its subcontractor).

158.163. Important note: the Beneficiary must clearly specify to the End-User that the modem must be left “on” in order to let the possibility to Proximus to perform all the actions required to identify and fix the issue.

13.5 Proximus’ liabilities in connection with incident reporting

159.164. Proximus starts the incident localization and performs repair activities during the intervention window depending on the contract type.

160.165. If the Beneficiary has communicated to Proximus measurements from equipment on the Beneficiary’s side that could help solve the incident, Proximus will analyze and verify them, and integrate them in its diagnosis process. In this event, Proximus will only be entitled to close the repair case, possibly qualifying it as “Wrongful Repair Request”, after analysis and verification of those measurements. The results of these will be made available to the Beneficiary through the Incident & Repair Management Platform.

161.166. The Beneficiary recognizes that:

- If necessary, the Beneficiary is required to disconnect the terminal equipment at the End-User site upon Proximus’ request to allow proper measurements;
- Proximus can request to the Beneficiary a timeframe for disconnecting the Bitstream Fiber PON Service at the network side so as to be able to carry out the necessary measurements. Refusal from the Beneficiary to do so will imply that Proximus is not in a position to verify the line and can be considered as “Wrongful Repair Request”;
- The Beneficiary’s repair case must relate to the type of service for which the Bitstream Fiber PON Service has been ordered;
- During the repair process the Beneficiary may submit additional information in respect of a specific repair case, cancel a repair case or update a repair case on the same Bitstream Fiber PON End-User line.

162.167. The Proximus repair helpdesk reports the result of the repair activities to the Beneficiary immediately upon the repair intervention and the final (positive) remote test of the line.

163.168. Any additional feedback (repair status, follow-up,...) or any additional action (such as the creation of another field intervention or the organisation of a “DUO” intervention during which a Beneficiary’s technician and a Proximus technician are going together on site) requested by the Beneficiary during the repair case lifecycle will be taken care of through the Proximus repair helpdesk.

~~164~~169. Proximus reserves the right to contact and make, in urgent occurrences only (i.e. exceptional cases of *force majeure*), an appointment with the End-User of the Beneficiary for the repair of the Bitstream Fiber PON Service.

~~165~~170. In case of Planned Work on the Proximus ~~or JV~~ network infrastructure or incident alert that can affect the Bitstream Fiber PON Service, Proximus shall inform the Beneficiary via the Incident & Repair Management Platform.

13.6 Special conditions in connection with Repair

~~166~~171. When the End-User connects equipment (on its side) that is not compliant with the ones defined in the Annex 2 “Technical Specifications”, sections “Physical Transport (Layer O)” and “Service Box” of the present Bitstream Fiber PON Reference Offer, or equipment that causes disturbances for Proximus and/or for other Beneficiaries in the same PON, Proximus is entitled to disconnect the Bitstream Fiber PON Service after prior notification of the Beneficiary.

~~167~~172. In case the responsibility for the incident cannot immediately be placed, and where Proximus makes coordinated efforts with one or more Beneficiaries, settlement is made or arranged after the conclusion of the repair.

13.7 Repair Request and Feedback

13.7.1 Shared/Single VLAN and OLO Access Line level

~~168~~173. The Beneficiary's requests for repair at Shared / Single VLAN level and OLO Access Line level will be answered by the ICT Service Desk. Any communication regarding the repair of OLO Access Lines should be directed to the ICT Service Desk through the Incident & Repair Management Platform or, as back-up solution, via phone or e-mail. The ICT Service Desk representatives will however not accept direct calls/emails from the End-User.

~~169~~174. In the same line, any follow-up feedback given to the Beneficiary during the repair case lifecycle will be through the ICT Service Desk so as to ensure continuity and consistency.

~~170~~175. The escalation procedure document for the repair can be found on the secured part of the Proximus wholesale website.

13.7.2 End-User line level

~~171-176.~~ The Beneficiary's repair cases at End-User line level will be answered by the Proximus repair helpdesk. Any communication regarding the repair should be directed to the Proximus repair helpdesk through the Incident & Repair Management Platform or, as back-up solution, via phone or e-mail. No direct calls/emails from the End-User will be accepted.

~~172-177.~~ In the same line, any follow-up feedback given to the Beneficiary during the repair case lifecycle will be through the Proximus repair helpdesk so as to ensure continuity and consistency.

~~173-178.~~ The Beneficiary has to provide in each repair case the service identifier (circuit ID) that was provided by Proximus in the End-User line provisioning process. The Beneficiary repair case must relate to the type of service for which this line has been ordered. If the reported incident does not match the service ordered by the Beneficiary as documented, the repair case will be rejected. During the repair process the Beneficiary may also submit additional information for a specific case, cancel a case or update a case.

~~174-179.~~ Specific remark on the use of the circuit ID: whenever there is a modification on the installation of a line, the circuit ID identifying the line could change. The "MSO User Guide" document, which can be retrieved from the secured part of the Proximus wholesale website, summarises the cases where the circuit ID changes or remains unchanged.

~~175-180.~~ _____ To allow Proximus to contact the End-User approximately 30 minutes before ~~the~~ its intervention to confirm that the technician (or splicing team) is coming, the Beneficiary will transmit to Proximus the contact point of the End-User and his/her phone number together with the appointment booking details (if required).

~~176-181.~~ The escalation procedure document for the repair can be found on the secured part of the Proximus wholesale website.

13.8 SNA and Splicing Interventions (detected during repair)

~~177-182.~~ During the repair process it may appear necessary for Proximus to execute Small Network Adaptations (SNA).

~~178-183.~~ _____ SNA can occasionally be identified via the repair process. Such cases are very limited and are typically coming from situations where the SNA was not detected during the provisioning process¹.

¹ Example: a Change Operator order with the installation method "Remote" while the ONTP has been damaged by the End-User. In such cases, no technician has been sent on site to activate the ONT and perform the measures so that the damaged ONTP might only be detected during the repair.

~~179.184.~~ SNA detected during repair is by default limited to lines on which no traffic has been measured within 14 calendar days following the closure of the provisioning.

~~180.185.~~ Splicing interventions are all splicing works (e.g. replacement of a damaged fiber) performed by splicers during repair interventions. Splicing Interventions do not fall within the Street plan request obligations as imposed by e.g. article 192/2 of the RGIE/AREI. Splicing Interventions have to be notified by Proximus to the regional platforms (POWALCO, GIPOD and OSIRIS) as soon as the work is finished.

13.9 Wrongful Repair Request

~~181.186.~~ In case of a repair case where the incident is actually not located on the Proximus or JV network infrastructure and Proximus has performed work for that repair case, useless costs are incurred by Proximus. To encourage the Beneficiary to effectively use the diagnose task functionality provided by Proximus and perform a prior check on the line and on the connected equipment, Proximus will bill an incentive fee to the Beneficiary. There will be an indication of the repair case reference and the cause of the “Wrongful Repair Request”.

13.10 Repair Process flows

~~182.187.~~ Reference is made to the Process Flows describing the Repair Business Processes of the Bitstream offer, which can be retrieved from the secured part of the Proximus wholesale website in the section “Operational Documentation” of the Regulated Services menu.

14 Phases in the provisioning of the Bitstream Fiber PON Service

~~183.188.~~ The way of provisioning the Bitstream Fiber PON Service to the Beneficiary will evolve according to the following 2 successive phases: Friendly User Testing Phase and Full Commercial Phase.

14.1 Friendly User Testing Phase

~~184.189.~~ During the Friendly User Testing Phase, hereunder referred to as FUT, Proximus will support the Beneficiary to get acquainted with the processes and systems in scope of the Bitstream Fiber PON Service.

~~185.190.~~ Each of the Parties will have to agree on the date of successful completion of the Friendly User Testing Phase. The FUT phase should cover a period of at least 10 working days.

~~186.191.~~ The FUT Phase is executed at one Service PoP, linked to at maximum two LEXs enabled for Bitstream Fiber PON. The number of Friendly Users (to be provided by the Beneficiary) is set at maximum 24 per Beneficiary.

~~187.192.~~ In case the Beneficiary would intend to start separately with Bitstream Fiber PON Shared VLAN, Bitstream Fiber PON Single VLAN and Bitstream Fiber GPON Dedicated VLAN, three separate FUT must be organized, one for Shared VLAN, one for Single VLAN and one for Dedicated VLAN.

14.2 Full Commercial Phase

~~188.193.~~ The Full Commercial Phase will entirely be based on Beneficiary's firm orders submitted by the Beneficiary. The number of orders must be reasonable and progressive to avoid that the provisioning helpdesk and support services of Proximus are overloaded by large amounts of initial orders.

~~189.194.~~ All questions or issues regarding the provisioning of individual End-User lines are to be addressed to the provisioning helpdesk by phone (: +32 78 152 232) or preferably by using the ticketing tool.

15 Information on IT projects

~~190-195.~~ For any changes initiated by Proximus which can have a significant impact on the IT systems of the Beneficiaries (e.g. a change in the XSD structure, a new type of XML message, a new exchange process), Beneficiaries shall be notified at least 6 months in advance with a high level description of the impact and with a structure of the documentation. Proximus will provide the detailed impact and documentation 3 months prior the start of the modifications.

~~191-196.~~ For smaller changes (e.g. new or changed values in an existing XML field, new feedback codes, use of new fields in the existing XSD structure), Beneficiaries shall be notified at least 3 months in advance with a high level description of the impact and with a structure of the documentation. Proximus will provide the detailed impact and documentation 1 month prior the start of the modifications.

~~192-197.~~ The BIPT will be informed in any case.

~~193-198.~~ Concerning the periods of notice, the BIPT can allow exceptions.

Appendix A: Statement of Requirements, template for the Beneficiary

General

~~194.~~199. This appendix includes a non-exhaustive list of items that should be included in the Statements of Requirements (SOR). This template is only a guideline. It is the freedom of both Parties to discuss the content of the SOR.

Basic information

Registered name and address of Beneficiary

Beneficiary name :

Address :

Postal code and city :

Country :

Telephone number :

Fax number :

VAT registration number :

Trade register :

Confidentiality agreement

~~195.~~200. The Parties can choose to sign a confidentiality agreement as part of the SOR. The statements included in this agreement are to be determined by the Parties.

Key Contacts list

Key project dates

	Date required by Beneficiary	Indicative dates from Proximus
Requested date to start Friendly User Test		
Requested bringing into service date of Bitstream Fiber PON ordering		

Bitstream Fiber PON Products and Services Beneficiary wishes to obtain from Proximus

Please indicate which services you wish to obtain from Proximus in scope of Bitstream Fiber PON:

Name	Interest (Yes / No)
Wholesale Home Termination	
Bitstream Fiber GPON Shared VLAN	
Bitstream Fiber XGS-PON Shared VLAN	
Bitstream Fiber GPON Dedicated VLAN	
Bitstream Fiber GPON Single VLAN	
Bitstream Fiber XGS-PON Single VLAN	

Appendix B: Description of the Forecasting Process

General Principles

~~196-201.~~ This chapter describes the forecasting process. The forecasts are prerequisites for the respect by Proximus of the SLA on Slot Availability for orders submitted via the MSO (GUI & SOA) interface. Forecasts are needed to help Proximus plan a reasonable capacity to fulfil Beneficiary's demand.

~~197-202.~~ Beneficiaries are guaranteed that Proximus will set-up the necessary resources for the period concerned to meet its market needs.

~~198-203.~~ The forecasted volumes (provide, change operator /~~swap telco~~, change, migrate and move included) are established by sub-area/area and ventilated per Installation Method ("with customer visit" or "with customer visit splicing included" for Bitstream Fiber PON), all products (Bitstream and BRUO) combined. Bitstream Fiber PON orders with the technician type "Partner Technician" are not taken into account in the forecast.

Geographic (sub-)areas:

Sub-area 1.1	West Vlaanderen
Sub-area 1.2	Oost Vlaanderen & Vlaams-Brabant - west
Sub-area 2.1	Antwerpen
Sub-area 2.2	Vlaams-Brabant - oost & Limburg
Area 3	Brussels (19 municipalities)
Area 4	Hainaut & Brabant wallon
Area 5	Liège, Namur & Luxembourg

~~199-204.~~ For the three first series of forecasts of a new Beneficiary, both Parties will enter into good faith discussions about the submitted forecasts and the feasibility to implement the forecasts concerned.

Processing of Forecasts

~~200-205.~~ Proximus will propose an individual forecast to each Beneficiary, based on the mathematical average of the actual ordered volumes of the Beneficiary over the last 6 months. By the 10th of each month at the latest, Proximus will download on the ShareSpace of each Beneficiary the individual forecast proposal. This forecast will be elaborated per month, per installation method & per area/sub-area for all BRUO and Bitstream products combined.

~~201-206.~~ The Beneficiary is responsible for the accuracy of the forecast. Therefore, the Beneficiary is requested to confirm or modify this forecast by e-mail (to cws.forecasting@proximus.com), at the latest one month prior to the first forecasted period in time. Forecast modifications or confirmation shall be done through the use of the templates provided by Proximus. These templates will only be considered as valid when they are properly completed. In case data is missing or is not correct, the forecast will be rejected (within 5 working days following its reception). In the latter case, the reasons of rejection will be indicated on the template by Proximus.

~~202-207.~~ If no confirmation or modification is received by that time, Proximus will consider the proposed forecasted volumes as confirmed. Once confirmed, the forecasted volumes are globalized by Proximus into one basket. Capacity reservation as well as calendar dimensioning is done accordingly to fit the needs of the entire market.

E.g.:

By 10th September 2017, Proximus downloads the Beneficiary X forecast of November 2017 to January 2018 on its ShareSpace (forecasted volume=mathematical average of the monthly volumes ordered by the Beneficiary X between March and August 2017);

Beneficiary X may send a modified forecast by e-mail to Proximus (cws.forecasting@proximus.com) until 30th September 2017.

Proximus will implement the Beneficiary X modified forecast (or by default the Proximus proposal) in its systems, and use it to determine global overrun and monthly deviations.

Deviations between successive forecasts

~~203-208.~~ The globalized volumes forecasted by the entire market at month M will be compared with the volumes forecasted at month M-1. For each forecasted month common to the 2 successive forecasts, the maximum deviation between the successive forecasts of this month at month M and at month M-1 will be – 30 % to + 30 %.

Deviations between forecasted volumes and actual volumes

Underrun

~~204-209.~~ Underrun occurs when actual ordered volumes are below forecasted volumes. Any underrun mechanism applies to the entire globalized volume of orders of the entire market.

~~205-210.~~ A reasonable underrun of the forecasted volumes can be absorbed by Proximus and has no direct consequences for the Beneficiary. A reasonable underrun is considered to be no more than a 20% deviation of the forecasted volume, considered on a monthly basis. In case of severe underrun (i.e. more than 20%) and in case this underrun was caused by a single Beneficiary who excessively increased the volume proposed by Proximus, Proximus reserves the right to limit the allowed modification for the forecast of the following 3 months for that Beneficiary to a level deemed necessary by Proximus.

E.g.: The proposed volume for all Beneficiaries for month X is 1000 (=average of the actual ordered volumes of the last 6 months). Some Beneficiaries send a modification of their forecasted volume via CWS.forecasting@Proximus.com and the forecasted volume for all Beneficiaries is confirmed at 1500. The realised volume for month X is finally lower than 1200 (1500-20%=underrun). If among the Beneficiaries that had sent a modification, the realised volumes are more than 20 % under the modified volumes, they will be identified as responsible of the underrun and won't have the possibility to modify the proposed forecasting during the following 3 months.

Overrun

~~206-211.~~ Global Monthly Overrun occurs when actual ordered volumes are above forecasted volumes. Any overrun mechanism applies to the entire globalized volume of orders of the entire market.

As from the first order exceeding the globalized forecasted volume, independently of which Beneficiary might be the cause of this overrun, all orders of all Beneficiaries for the remainder of the month will be considered in "overrun".

Appendix C: Forecasting templates for BRUO and Bitstream End-User Line orders

~~207-212.~~ Remarks:

- M_i refers to the month in which the forecasting templates are submitted.
- All quantities (M1 to M12) are incremental values.

“Beneficiary Operations” Forecast

Forecasting Template for BRUO and Bitstream Orders

Beneficiary reference:

Edition:

Split: With Customer Visit & With Customer Visit splicing included for Bitstream Fiber PON orders

Reception date:

Telephone Zone	M ₁	M ₂	M ₃	M ₄	M ₅	M ₆	M ₇	M ₈	...	M ₁₂
Sub-area 1.1										
Sub-area 1.2										
Sub-area 2.1										
Sub-area 2.2										
Area 3										
Area 4										
Area 5										

Appendix D: Order Templates

End-User line

~~208-213.~~ Ordering a Bitstream Fiber PON End-User line is done through the MSO interface. For detailed information, reference is made to the “MSO User Guide” documented on the secured part of the Proximus wholesale website.

Transport

~~209-214.~~ For Bitstream Fiber PON with Shared or Single VLAN: ordering bandwidth capacity by LEX, as well as changing or ceasing bandwidth is done through the MSO interface. For detailed information, reference is made to the “MSO User Guide” documented on the secured part of the Proximus wholesale website.

~~210-215.~~ For Bitstream Fiber GPON with Dedicated VLAN: adapting the VLAN profile of a line with Dedicated VLAN is done through the MSO interface. For detailed information, reference is made to the “MSO User Guide” documented on the secured part of the Proximus wholesale website.

OLO Access Line

~~211-216.~~ The order form hereafter concerns the ordering of an OLO Access Line in the framework of the Proximus Bitstream Fiber PON offer.

~~212-217.~~ This offer is valid for a period of four weeks from the signature of this OLO Access Line order form.

Ethernet OLO ACCESS LINE (OAL):

Order Form

1. Please complete each section of this form as accurately as possible.
2. The instructions given at the bottom of each block will help you complete this form.
3. Please complete one form per requested line.

1. YOUR ADDRESS

Company name:
 Address:
 Postal code and city:
 Country:
 Telephone number:
 Fax number:
 VAT registration number:
 Trade register:

>> Please complete all items in this block accurately.

2. YOUR BILLING INFORMATION

2.1. Your billing address (if different from 1.)

Company name:
 Address:
 Postal code and city:
 Country:
 Telephone number:
 Fax number:
 VAT registration number:
 Trade register:

2.2. References

Your customer number (this number is mentioned on your invoice)

Your own reference (up to 20 digits or letters)

>Your customer number: this is your reference number in our billing system which is stated on your invoice.

3. TYPE OF REQUEST

NEW LINE

- 3.1. ☐ I wish to order a **new** OAL line (I specify the technical specifications of the new line in section 5 below).
I would like to have my line installed by (CRD):

CHANGE

- 3.2. ☐ I would like to **change** my OAL line type (I specify the technical specifications of the new line in section 5 below).
I would like to have my line changed on (CRD):
The line code number is:

CEASE

- 3.3. ☐ I would like to **cease** my OAL line on:
The line code number is:

>> You are kindly requested to always enclose a plan.

4. ADDRESS OF THE OAL END POINTS

4.1. Proximus Service PoP:

4.2. COLOCATION or Customer external site

Colocation room (only for colocation):

Proximus Node (only for colocation):

Customer Name:

Address:

Building:

Floor and room no.:

Postal code and city:

Contact person (Administrative):

Phone number (or GSM):

Contact person (Technical) :

Phone number (GSM) :

Fax number:

Manned site ☐ YES ☐ NO

>> Contact: Please specify an administrative and technical person in the building who is informed about the installation.

5. TECHNICAL SPECIFICATIONS OF THE LINE

5.1. OAL type:

- Standard OAL:

- ☐ 1GE / Proximus sited
- ☐ 10GE / Proximus sited
- ☐ 1GE / Customer sited
- ☐ 10GE / Customer sited
- ☐ 1+1 GE / Proximus + Customer sited
- ☐ 10+10 GE / Proximus + Customer sited
-
- ☐ 1GE / Backhaul
- ☐ 10GE / Backhaul

- Multichassis OAL:

- ☐ 1+1 GE / Proximus sited (LACP secured)
- ☐ 10+10 GE / Proximus sited (LACP secured)
- ☐ 1+1 GE / Customer sited (LACP secured)
- ☐ 10+10 GE / Customer sited (LACP secured)
- ☐ 1+1 GE / Proximus + Customer sited (LACP secured)
- ☐ 10+10 GE / Proximus + Customer sited (LACP secured)

6. TECHNICAL SPECIFICATIONS OF END POINTS

6.1. Finishing

- New 19" rack to be provided by Proximus (against payment)
- New ETSI rack to be provided by Proximus
- A rack already exists, Proximus only has to supply the following components

Colocation or
Customer
external site

- ☐
- ☐
- ☐

6.2. Patchpanel situation

Place of the patchpanels or racks of the Beneficiary on the ground, in the colocation areas :

6.3. Interface

1. Proximus sited
Optical : GigE type LX ; wavelength 1310nm – SC/APC 8° ☐
2. Customer sited
Optical: GigE type LX ; wavelength 1310nm - SC/PC ☐
LC/PC ☐

7. CONTRACT DURATION

7.1. Standard contract (minimum 1 year)

☐ 1 year ☐ 2 years ☐ 3 years ☐ 4 years ☐ 5 years

8. ADDITIONAL INFORMATION

Terms and Conditions

Proximus shall provide the Service to the Beneficiary under the conditions and prices set up in the Bitstream Fiber PON offer.

Drawn up at....., on.

Name and title of applicant.....

Signature,

◆◆◆◆◆ End of document ◆◆◆◆◆