



**FIBERKLAAR BV**  
**REFERENCE OFFER**

Reference Offer made by	Fiberklaar B.V.  Raymonde de Larochelaan 13B-2-03  9051 Gent  RPR Gent 0760.540.475
Approved by	Belgian Institute for Postal Services and Telecommunication (BIPT) on [insert date]
Version	1.4
Date	[insert date]
URL	This document can be found at [insert URL]
Any further questions about Fiberklaar's reference offer or about this document?	Contact Peggy-Ann Kruisland, <a href="mailto:peggy-ann.kruisland@fiberklaar.be">peggy-ann.kruisland@fiberklaar.be</a>

## Table of Contents

1. Definitions and interpretation.....	4
Interpretation .....	7
2. Purpose .....	8
3. Operator's Access to the FTTx Network .....	9
4. Operator's use of the FTTx Network .....	9
5. Ownership of the FTTx Network, Fiberklaar Equipment and Operator Equipment.....	10
6. Operator Equipment and Collocation.....	10
7. Ordering and provisioning.....	11
8. Access register .....	11
9. Service quality: Service Levels and Service Credits.....	11
10. Subcontracting .....	12
11. Governance & processes .....	12
12. Maintenance, Substitution or Relocation .....	12
13. Charges and payment .....	13
14. Warranties .....	13
15. Liability and indemnity.....	13
16. Force Majeure.....	15
17. Term, suspension and termination .....	15
18. Access Point Portability .....	16
19. Intellectual Property Rights .....	16
20. Confidentiality .....	16
21. Compliance .....	17
22. Audit .....	18
23. No Partnership .....	19
24. Personal data and privacy .....	19
25. Dispute Resolution Procedure.....	20
26. Assignment .....	20
27. Miscellaneous .....	20
Annex 1 - Commercial conditions and charges on Wholesale ODF Access.....	23
Annex 2 - Service Description to Reference offer concerning the use of passive fiberglass networks.....	40
Annex 2.1 - Technical Description to Reference offer concerning the use of passive fiberglass networks.....	59
Annex 2.2 - Ordering and Delivery (O&D) Reference offer concerning the use of passive fiberglass networks.....	70
Annex 2.3 Repair & Maintenance (R&M) to Reference offer concerning the use of passive fiberglass networks .....	83
Annex 2.4 - Operational Interfaces to Reference offer concerning the use of passive fiberglass networks .....	89
Annex 4 - Deployment projection .....	115
Annex 5 - Commercial campaigning principles .....	118
Annex 6 - Data protection.....	120

## 1. Definitions and interpretation

Unless the context requires otherwise, capitalised terms and expressions in this Reference Offer shall have the following meaning:

**"Access"** means access to the FTTx Network as set out in article 3.1;

**"Access Point"** means a unique address to which a fiber optic connection cable is offered via a Service Order to the indoor installation and may be equipped with a Fiber Termination Unit ("FTU"), whereby in a multi-dwelling unit ("MDU"), each apartment is counted as one Access Point. Access Points can have two statuses:

- "not connected", which means that the Access Point does not have an FTU; or
- "connected", which means that the Access Point is connected to the FTTx Network and an FTU is available at the location.

**"Access Register"** means a register of all Access Points managed by Fiberklaar with description of status and history for each Access Point that allows Fiberklaar to register, monitor and manage the Access Points. The information contained in the Access Register is detailed in Annex 4;

**"Active Customer"** means a Customer which has an active service with active equipment located at Customer's premises and administered by a Service Provider leveraging the FTTx network of Fiberklaar;

**"Active Network Layer"** refers to the electronic network equipment needed to bring the passive FTTx infrastructure alive, as well as the operational support systems required to commercialise an FTTx product;

**"Affiliate"** means with respect to any person, as the case may be, any person that Controls, is under common Control with, or is Controlled by such person;

**"Area POP"** means a Point of Presence, physical area where passive Operator Equipment may be connected to the FTTx Network (depending on availability of space) and where each point-to-point connection terminates. The Area POP is connected in a ring architecture, providing access to the Central POP. In Annex 2.1, Area PoP is referred to as WP (WijkPoP);

**"Business Day"** means any day (other than a Saturday or Sunday) when banks in Brussels are open to the general public for the transaction of normal business;

**"Central POP"** means the physical area where active Operator Equipment at the POP location will be connected to the FTTx Network. From the Central PoP each Area PoP is connected in a ring architecture. In Annex 2.1, Central PoP is referred to as LC (LocalCenter);

**"Charges"** means the fees and charges payable to Fiberklaar in accordance with Annex 1;

**"Confidential Information"** means, without being limited thereto, designs, concepts, drawings, ideas, inventions, specifications, techniques, discoveries, models, data, source code, object code, documentation, diagrams, flow charts, research, development, processes, procedures, know-how, new product or new technology information, marketing techniques and materials, marketing plans, timetables, strategies and development plans (including prospective trade names or trademarks), pricing policies, information relating to a Party's business and financial information, as well as information related to each Party's employees, customers, prospects or end-users of each Party's customers, including Personal Data;

**"Contract Year"** means each consecutive twelve (12) month period from the Effective Date;

**"Customer"** means the Subscriber or Service Provider with whom Operator has a contractual agreement for broadband connectivity and/or ancillary services;

"**Deployment Area**" means each of the areas (cities/neighbourhoods) in which the FTTx Network will be deployed by the Fiberklaar pursuant to the Deployment projection set out in Annex 4;

"**Dispute**" means any dispute in relation to any aspect of, or failure to agree any matter arising in relation to, the agreement to be entered into by Fiberklaar and Operator or any document agreed or contemplated as being agreed pursuant to such agreement;

"**Dispute Resolution Procedure**" means the procedure for the resolution of Disputes specified in article 25;

"**Drop Cable**" means the physical fiber optic cable located on the Subscriber end which connects the Access Point to the FTTx Network;

"**Effective Date**" means the date of signing of the agreement to be entered into by Fiberklaar and Operator;

"**Fiber Termination Unit**" or "**FTU**" means a passive socket outlet which is installed at the Access Point and allows Operator to connect Operator Equipment (Customer Premises Equipment or CPE) to the FTTx Network;

"**Fiberklaar**" means FIBERKLAAR BV, Raymonde de Larochelaan 13B-2-03, 9051 Gent, RPR Gent 0760.540.475;

"**Fiberklaar Equipment**" means the Equipment used and operated by Fiberklaar to provide Access and the Services;

"**Footprint**" means the totality of all Deployment Areas;

"**Force Majeure Event**" means any occurrence beyond a party's reasonable control affecting the performance of its obligations, including but not limited to a refusal or failure by competent authorities to grant the necessary authorisations and/or permits in good time, a failure to obtain access to buildings (in a timely manner), a failure to organise the dependencies by or on behalf of the Operator (in due time), labour disputes, time lost through frost, epidemic, war, riot, civil disturbance, sabotage or adverse weather conditions;

"**FTTx Network**" means the *fiber* access network to which Operator shall be granted Access, as described in Annex 2 - Service Description to Reference offer concerning the use of passive fiberglass networks. The FTTx Network is designed, built, operated and Maintained by Fiberklaar; "**GCO**" means the *generic closure organiser* wherein optical fibers connect, located under the sidewalk or pavement;

"**Good Industry Practice**" means the exercise of reasonable skill, care, prudence, efficiency, foresight and timeliness which would be expected from a reasonably and suitably skilled, trained and experienced person providing services similar to the Services to a customer similar to the Operator, respectively the Fiberklaar;

"**Home Activated**" means a Premise which Fiberklaar has connected to the Network and patched;

"**Home Connected**" means a Premise which the Fiberklaar has connected to the Network, and which is already activated or can be activated without further installation work at the customer's Premises being required. The construction of vertical cabling up to the floor box for MDU is included in the definition;

"**Home Passed**" or "**HP**" means a Premise for which Fiberklaar has the capability to connect it to the Network, in a service area, without further distribution or feeder line construction, which will include with respect to an MDU the construction of vertical cabling up to the floor box. For the avoidance of doubt, in case of MDUs where the façade deployment to the MDUs is not convenient, the term "Home Passed" comprises as the case may be the Drop Cable into the basement for smaller MDUs and the vertical cabling up to the floor box for large MDUs;

"**Infrastructure**" means the physical elements that are required to build the FTTx Network, including the ducts and poles on which the FTTx Network is deployed;

"**Intellectual Property Rights**" means all (i) patents, patent applications, patent disclosures and inventions (whether patentable or not), (ii) trademarks, service marks, trade dress, trade names, registered designs, logos, corporate names, rights in designs, internet domain names, and registrations and applications for the registration thereof together with all of the goodwill associated therewith, (iii) copyrights and copyrightable works (including

mask works) and registrations and applications thereof, (iv) computer software programs (including source code and object code), data, database rights, databases and documentation thereof, (v) trade secrets, inventions and other confidential information (including ideas formulas, compositions, inventions, improvements, know-how, manufacturing and production processes and techniques, research and development information, drawings, specifications, blueprints, flowcharts, schematics, protocols, programmer notes, designs, design rights, developments, discoveries, plans, business plans, proposals, technical data, financial and marketing plans and customer and supplier lists and information), and (vi) all other forms of intellectual property;

**"Key Performance Indicators"** means those Service Levels identified as Key Performance Indicators in Annex 3 Service Level Agreement (SLA) to Reference offer concerning the use of passive fiberglass networks;

**"Maintain"** shall have the meaning set out in Annex 2 - Service Description to Reference offer concerning the use of passive fiberglass networks;

**"ODF Capex Class"** means the capex unit costs associated with a generic Home Passed within each of the Deployment Areas within the Footprint, including the capex required to transform a Home Passed into a Home Connected minus the one-off connection fee received by the Fiberklaar from the Service Providers. For the avoidance of doubt, these unit costs do not include any commercial campaigning, maintenance or IT capex, neither any other capex that is not directly linked to the construction of a Homes Passed or Home Connected;

**"Operator"** means a provider of Wholesale and/or Retail Services, offering publicly available electronic communication services, active on the Belgian market, registered with the BIPT/IBPT and seeking to obtain access to the full FTTx Network;

**"Operator Equipment"** means the equipment installed and operated by Operator linked to the FTTx Network and equipment that Operator shall install at the Access Points;

**"Optical Distribution Frame"** or **"ODF"** means the distribution frame in a rack in a POP Location installed by Fiberklaar to terminate each individual Home Activated;

**"Passive Network Layer"** means the physical elements that are required to build the FTTx Network. This includes a.o. the optical fiber cables, fiber enclosures, optical distribution frames, patch panels and splicing shelves;

**"Point to Point"** or **"PTP"** means a point-to-point fiber connection which runs between the FTU at an Access Point and the Area POP.;

**"POP Location"** means the space in the Central POP or Area POP where Operator shall install Operator Equipment;

**"Premise"** means a home or place of business. In a multi-dwelling unit ("MDU") each apartment is therefore counted as one;

**"Reference Offer"** means the present reference offer, including its annexes;

**"Regulations"** means any laws, regulations, decisions, regulatory constraints, obligations or rules (including codes of conduct and statements of principle incorporated and contained in such rules) in Belgium that are applicable to the existence or operation of this Reference Offer or the provision of and payment for the Services (as applicable) from time to time;

**"Regulator"** means a government department or regulatory authority, statutory or other body, entity or committee, which, whether under law, statute, rule, regulation, code of practice or otherwise, is entitled to regulate, investigate or influence the matters dealt with in this Reference Offer, including any telecom regulatory, competition or tax authority;

**"Retail Services"** means retail telecommunication services offered by Operator or a Service Provider to one or more Subscribers;

**"Service Credit"** means an amount calculated in accordance with Annex 3 Service Level Agreement (SLA) to Reference offer concerning the use of passive fiberglass networks in respect of a failure by Fiberklaar to meet a Key Performance Indicator;

**"Service Levels"** means the service levels set out in Annex 3 Service Level Agreement (SLA) to Reference offer concerning the use of passive fiberglass networks;

**"Service Order"** means an Order to grant Access and/or provide Services in accordance with Annex 2 - Service Description to Reference offer concerning the use of passive fiberglass networks;

**"Service Provider"** means a customer of Operator (including a telecoms operator) who purchases Wholesale Services from Operator and offers Retail services to the Subscriber;

**"Services"** means (i) the services related to the Access and (ii) the ancillary services including POP Services, each further detailed in Annex 2 - Service Description to Reference offer concerning the use of passive fiberglass networks;

**"Subscriber"** means an end customer of Operator or Service Provider;

**"Wholesale Services"** means the provision of wholesale broadband access services by Operator to a Service Provider.

## Interpretation

1. Headings and titles used in this Reference Offer are for convenience only and shall not affect the construction or interpretation of this Reference Offer.
2. The words "include", "includes" and "including" and all forms or derivations thereof shall mean including without limitation.
3. A time of day is a reference to Brussels time and a reference to a day (including within the term Business Day) shall mean a period of twenty-four (24) hours running from midnight to midnight; for the calculation of a period of time, such period shall start the next following day on which the event triggering such period of time has occurred and the expiry date shall be included in the period of time. If the expiry date is not a Business Day, the expiry date shall be postponed until the next Business Day. All periods of time consisting of a number of months (or years) shall be calculated from the next following day on which the event triggering such period of time has occurred until the eve of the same day in the following month(s) or year(s).
4. When using the words "*shall cause*" or "*shall procure that*" (or any similar expression or derivation thereof), the parties intend to refer to the Belgian legal concept of "*sterkmaking*".
5. When using the words "*shall use its best efforts*" or "*shall use its best endeavours*" (or any similar expression or derivation thereof), the parties intend to refer to the Belgian legal concept of "*middelenverbintenis*".
6. Whenever Dutch translations of certain words, expressions or legal concepts are contained in the Reference Offer, such translation shall be conclusive in determining the legal concept(s). English

language words used in this Reference Offer intend to describe Belgian legal concepts only and the consequences of the use of those words in English law or any other foreign law shall be disregarded.

7. In this Reference Offer, a reference to:
  - a) an article or annex, unless the context otherwise requires, is a reference to an article of or annex to this Reference Offer;
  - b) a "*person*" includes a reference to any individual, firm, company, corporation or other body corporate, government, state, agency of a state, joint venture, association, partnership, works council or employee representative body (in each case whether or not having separate legal personality);
  - c) general words shall not be given a restrictive meaning by reason of the fact that they are followed by particular examples intended to be embraced by the general words.
8. If there is any conflict or inconsistency between a term in the main part of this Reference Offer and the annexes (or other documents referred to or otherwise incorporated into this Reference Offer), the following order of priority shall apply (a document higher on the list prevailing over a document lower on the list):
  - a) The main part of this Reference Offer;
  - b) The annexes to this Reference Offer;
  - c) The other documents referred to in this Reference Offer.

## 2. Purpose

- 2.1 This document describes the Reference Offer of Fiberklaar to provide Access and Services to Operator. Upon receipt of an access request based on the Reference Offer, Fiberklaar shall negotiate in good faith with Operator with the aim of concluding a binding agreement within 15 days of the access request, provided that the access request corresponds to the Reference Offer or that only differs very minimally from it.
- 2.2 Effective provision by Fiberklaar to Operator of Access and Services shall always be subject to entering into a written agreement between Fiberklaar and Operator.
- 2.3 Fiberklaar's Reference Offer concerns an open "point to point" fiber-to-the-x network ("FTTx Network") in certain areas in the Flanders region of Belgium and allows passive (physical) access to the FTTx Network on a non-exclusive and non-discriminatory basis to Operators as described in article 3.1. Access to the FTTx Network is intended to be provided under an "Open Access" model in that access will be granted on a non-discriminatory basis to Operators enabling them to reach Subscribers or other Service Providers without the need for these Service Providers to deploy a dedicated fiber access network.
- 2.4 The provision of Access and Services is subject to the modalities and limitations set out in Annex 2 - Service Description & Working Level Agreement.
- 2.5 The Access and Services may change from time to time in accordance with the change management procedure agreed upon between Fiberklaar and Operator.



### 3. Operator's Access to the FTTx Network

3.1 Access to the FTTx Network is possible through:

- a) A connection from the Central POP to the Fiber Termination Unit of the FTTx Network; and
- b) A right to install, keep, access, maintain and repair its Operator Equipment at the POP Location in accordance with the provisions of Annex 2 - Service Description and Working Level Agreement.

on a non-discriminatory and non-exclusive basis subject to the modalities and limitations of the Reference Offer and to the terms and conditions of the agreement to be entered into between Fiberklaar and Operator.

3.2 The Operator shall solely be allowed to design, install, operate and maintain its Network Layer (e.g. to install Operator Equipment to connect to the FTTx Network in the POP Location and install Customer Premises Equipment at an Access Point) in accordance with the modalities and limitations of Annex 2 - Service Description to Reference offer concerning the use of passive fiberglass networks to provide Wholesale and/or Retail Services to its Customers using the Access and Services provided by Fiberklaar as input service. Fiberklaar is willing to accept requests for access by Operator that deviate from this article 3.2 (including annex 2) provided that such requests are not unreasonable in light of e.g. their technical, operational, organizational, financial and/or security implications.

3.3 Should Fiberklaar decide to conduct commercial campaigning, Operator shall act in accordance with and shall ensure its Service Providers act in accordance with the commercial campaigning principles set out in Annex 5.

### 4. Operator's use of the FTTx Network

4.1 Operator shall use the FTTx Network only in accordance with Good Industry Practice, in accordance with the standards of a reasonably diligent telecommunication operator and in accordance with the modalities and limitations of this Reference Offer.

4.2 Operator shall not:

- Make any changes to FTTx Network; or
- Carry out any work on the FTTx Network

unless requested by Fiberklaar to do so. If changes or modifications to the FTTx Network are made by Operator without the consent of Fiberklaar, Fiberklaar shall be entitled at any time to undo the modifications and restore the FTTx Network to its original condition at the expense and risk of Operator, irrespective of whether the modifications have been made to an Access Point serviced by Operator. In such case, Operator shall immediately repay such costs to undo the modifications, without prejudice to any other compensation (or termination of Access and Services by Company).

4.3 Solely Operator is responsible for offering Wholesale Services to its Service Providers and Retail Services to its Subscribers and Operator shall take reasonable measures to prevent any abuse of the FTTx Network by the Service Providers and the Subscribers.

## 5. Ownership of the FTTx Network, Fiberklaar Equipment and Operator Equipment

- 5.1 Notwithstanding the fact that Fiberklaar may make use of Infrastructure of third parties (subject to the limitations set out in article 3), the FTTx Network and all Fiberklaar Equipment that is used to provide the Access and Services to Operator are always and remain the property of Fiberklaar.
- 5.2 Fiberklaar shall install and manage (including repair and replacement) the Access Point and the FTU. Operator shall hold harmless and indemnify Fiberklaar for any costs and expenses resulting from damage and (repair) costs to the Access Point and/or FTU incurred by Fiberklaar and which are caused by Operator, a Service Provider or Subscriber, for the avoidance of doubt including in the course of the process of activation of any party becoming a Service Provider or Subscriber. Fiberklaar shall hold harmless and indemnify Operator for any costs and expenses resulting from damage and (repair) costs to Operator Equipment incurred by Operator and which are caused by Fiberklaar (or a third party acting on behalf of Fiberklaar).
- 5.3 Fiberklaar shall ensure that the specifications of Access Points are known to Operator.
- 5.4 Operator shall not move, add to, modify or in any way interfere with Fiberklaar Equipment, nor permit any other person (other than a person authorised by Fiberklaar) to do so. Operator shall be liable to Fiberklaar for any loss of or damage to Fiberklaar Equipment, except where the loss or damage is due to fair wear and tear or is caused by Fiberklaar. If Operator moves or changes the location of any Fiberklaar Equipment without Fiberklaar's prior written consent, Fiberklaar may recover any failed visits as a consequence or additional cost or expense incurred by Fiberklaar as a result of any lost or wasted time locating Fiberklaar Equipment.
- 5.5 Fiberklaar shall only provide Access and the Services to Operator in accordance with the modalities and limitations of the Reference Offer. Fiberklaar shall not move, add to, modify or in any way interfere with Operator Equipment, nor permit any other person (other than a person authorised by Operator) to do so. Fiberklaar shall be liable to Operator for any loss of or damage to Operator Equipment, except where the loss or damage is due to fair wear and tear or is caused by Operator. If Company moves or changes the location of any Operator Equipment without Operator's prior written consent, Operator may recover any failed visits as a consequence or additional cost or expense incurred by Operator as a result of any lost or wasted time locating Operator Equipment.

## 6. Operator Equipment and Collocation

- 6.1 Operator provides, installs, configures, monitors and maintains any Operator Equipment connected to the FTTx Network. Operator shall ensure that any Operator Equipment installed in the POP Location to make a connection to the FTTx Network meets the technical requirements set out in Annex 2 - Service Description to Reference offer concerning the use of passive fiberglass networks, and is used in accordance with any instructions and safety and security procedures applicable to the use of that Operator Equipment.
- 6.2 Operator and Fiberklaar shall cooperate to ensure that any Operator Equipment attached (directly or indirectly) to the FTTx Network by Operator is technically compatible with the FTTx Network and the Access. Fiberklaar does not make any commitment with respect to the interoperability between the

Service and Operator Equipment. In the case of malfunction, Fiberklaar and Operator will consult about taking preventive and corrective measures.

- 6.3 Fiberklaar shall implement security safeguards in accordance with Good Industry Practice to prevent any unauthorized access by third parties to any part of the FTTx Network.
- 6.4 Operator shall ensure that his employees and agents who are authorised to install and activate Operator Equipment on the FTTx Network, comply with the provisions stated in this article 6 or any other access & safety regulation as may be communicated by Fiberklaar in writing.

## 7. Ordering and provisioning

The ordering and provisioning of Access and the Services shall be governed by the provisions set out in Annex 2 - Service Description to Reference offer concerning the use of passive fiberglass networks.

## 8. Access register

- 8.1 Fiberklaar shall maintain an Access Register that will be shared with the Operator in which it shall specify, per Access Point, which is characterised by a unique fiber optic number, among other things, whether or not the Access Point is connected and/or active.
- 8.2 The rights and obligations regarding the Access Register are set forth in Annex 2 - Service Description to Reference offer concerning the use of passive fiberglass networks. Fiberklaar shall make available to Operator digital access to the Access Register.
- 8.3 The Access Register shall be shared at all times in line with the regulatory obligations of Fiberklaar.

## 9. Service quality: Service Levels and Service Credits

- 9.1 Fiberklaar shall provide the Services and perform its obligations:
  - So as to meet or exceed the Service Levels;
  - Without limiting paragraph (a), in accordance with Good Industry Practice; and
  - Using only Fiberklaar personnel that are appropriately qualified, experienced and competent to perform the tasks allocated to them, without prejudice to article 10.1.
- 9.2 The Key Performance Indicators are a subset of the Service Levels. If Fiberklaar fails to meet any Key Performance Indicator, Fiberklaar shall give a Service Credit calculated in accordance with Annex 3 Service Level Agreement (SLA) to Reference offer concerning the use of passive fiberglass networks, without prejudice to any other agreements Fiberklaar and Operator may reach in relation to particular services.
- 9.3 The Service Credits are intended to be a reduction in the Charges payable for Services to reflect the reduced value received by the Operator from those Services (as a result of their poor quality). The Service Credits shall constitute the sole remedy in case of failure to meet the relevant Key Performance Indicators and no other compensation shall be available to the Operator for any damage or loss that the Operator may suffer as a result of Fiberklaar's failure to meet the relevant Key Performance Indicators, nor shall there be any other rights or remedies for the Operator in respect of that failure.

- 9.4 Fiberklaar shall advise the Operator as soon as reasonably practicable of Fiberklaar's failure to perform any of its obligations under this Agreement and of any steps that the Company proposes to take to address the failure. Fiberklaar shall, at the Operator's option, and without any additional charge:
- To the extent feasible, use its best efforts to provide the Services as soon as possible; and
  - As soon as practicable, use its best efforts to ensure that the failure does not recur.
- 9.5 Fiberklaar shall provide monthly Service Level Agreement (SLA) reports to all service beneficiaries and to the BIPT. Fiberklaar will publish monthly the aggregated Key Performance Indicator report on its publicly accessible website.

## 10. Subcontracting

- 10.1 Fiberklaar shall have the right, without any form of notice to or approval from Operator, to use the Infrastructure of third parties and to use third party infrastructure providers or service providers as subcontractors to build (any parts of) the FTTx Network, to grant Access and/or to provide all or part of the Services.
- 10.2 Operator may use subcontractors for the technical implementation of part of its obligations, provided that such subcontractor shall be accredited by Fiberklaar through a contractor certificate and (continue to) comply with the certification policy as set forth in Annex 3 Service Level Agreement (SLA) to Reference offer concerning the use of passive fiberglass networks or as will be established by Fiberklaar at a later stage.
- 10.3 In case of subcontracting, the parties shall not be relieved of any of their liabilities or obligations and parties shall be liable to each other for the acts, defaults and neglects of any subcontractor or any employee or agent of the subcontractor as if these were acts, defaults or neglects of that party or the employees of that party.

## 11. Governance & processes

The parties agree to set up and follow the processes for governance and operational aspects as set forth in Annex 2.

## 12. Maintenance, Substitution or Relocation

Fiberklaar shall further be entitled to cause interruptions, disturbances or modifications of the FTTx Network to the detriment of the supply of the Services in connection with measures that are deemed necessary for technical, maintenance and operating reasons taking into account the balance of the interests of both Parties or that are ordered by the competent authorities. Fiberklaar shall give in good faith Operator the longest possible notice of interruptions, disturbances and modifications by any means it deems appropriate (e.g. via electronic communication) and state the reason for them.

### 13. Charges and payment

- 13.1 The provision of Access and Services is charged on the basis of the non-discriminatory pricing models set forth in Annex 1 - Commercial conditions and charges on Wholesale ODF Access.
- 13.2 In consideration for the Access and the Services, Operator shall pay the Charges according to the applicable pricing model (or a combination thereof) set forth in Annex 1 - Commercial conditions and charges on Wholesale ODF Access 0 - Commercial conditions and charges. The Charges are, to the extent applicable, exclusive of VAT (or any other taxes whatever they are called), which to the extent applicable will be charged in addition.
- 13.3 Fiberklaar shall issue and prepare the invoices based on the data in the Access Register and Annex 1 - Commercial conditions and charges on Wholesale ODF Access.
- 13.4 Unless otherwise agreed upon, Fiberklaar shall invoice the Charges in accordance with the invoicing terms or schedule as set forth in Annex 1 - Commercial conditions and charges on Wholesale ODF Access.

### 14. Warranties

- 14.1 Fiberklaar shall, at its own expense, obtain all permits and licenses, pay all fees, where required by any law or regulation applicable to the Access and the Services, or by Fiberklaar's performance under this Reference Offer. Fiberklaar hereby certifies compliance with all such laws.
- 14.2. Fiberklaar warrants that the Access will be granted and the Services will be performed in accordance with the standards of the industry, in conformity with the terms and conditions of this Reference Offer, with due care and diligence, using appropriately qualified and experienced personnel.
- 14.3 Operator shall notify Fiberklaar in writing if the Access or the Services fail(s) to meet the warranties contained in this Reference Offer as soon as reasonably practicable upon discovery of such failure.
- 14.4 Each party shall through all its contacts with customers and third parties safeguard the other party's brand name and any future brand name as well as its reputation, its products or employees.

### 15. Liability and indemnity

- 15.1 Subject to articles 15.2 to 15.5 but otherwise notwithstanding any other provision of this Reference Offer, and to the maximum extent permitted by applicable law, Operator nor Fiberklaar shall be liable to the other, whether in contract (including under any indemnity), in tort (including negligence), under any statute or otherwise under or in connection with this Reference Offer or the provision or receipt of the Services for or in respect of any indirect or consequential damages, including loss of profit, loss of goodwill, loss of business opportunities, and loss of anticipated savings.
- 15.2 Without prejudice to articles 15.1, 15.3, 15.4 and 15.5, either party's aggregate liability per Contract Year vis-à-vis the other party, whether in contract, in tort (including negligence), under statute or otherwise under or in connection with this Reference Offer or the provision or receipt of the Services shall in any case be limited to an amount equal to the lowest of the following amounts (i) an amount equal to the invoices of the preceding 12 months excl VAT, or (ii) 25,000 EUR.
- 15.3 The exclusions in article 15.1 and limits on liability set out in article 15.2 shall not apply in respect of:

- a) any liability for death or personal injury by a party or its personnel;
  - b) any liability for fraud ("*bedrog*" / "*dol*") or fraudulent misrepresentation by a party or its personnel;
  - c) any liability arising from a party's or its personnel's gross negligence ("*zware fout*" / "*faute lourde*") or intentional failure ("*opzettelijke fout*" / "*faute intentionnelle*");
  - d) damage to tangible property;
  - e) fines, liabilities and expenses imposed upon a party by a court, Regulator or other government body for breach of the law or regulations;
  - f) the obligation on Operator to pay undisputed Charges that have become due;
  - g) any indemnification obligations set out in this Reference Offer;
  - h) any other liability to the extent to which it cannot be lawfully excluded.
- 15.4 Operator accepts that Fiberklaar cannot be held liable for:
- a) any hacking or compromise of the security of the Operator's Equipment or network;
  - b) any Event of Default on the part of Fiberklaar if such Event of Default is exclusively attributable to (i) an error on the part of Operator or a third party appointed by it, (ii) any defect in goods not supplied by Fiberklaar.
  - c) the content of the communications and data transferred over the FTTx Network; Operator, its Service Providers and its Subscribers are responsible for making the necessary back-ups of such data and information.
  - d) any unauthorized or inappropriate use or misuse of the Services and/or the FTTx Network by Operator, its Service Providers or its Subscribers, including any use against Fiberklaar's instructions or policies.
- 15.5 Fiberklaar does not assume any responsibility towards third parties, including but not necessarily limited to, employees and agents of Operator, and if any, Service Providers and Subscribers. Operator shall indemnify Fiberklaar against any claim from a third party, including but not limited to, claims from Service Providers and Subscribers who have a contractual relationship with Operator, without prejudice to any recourse as between the Fiberklaar and the Operator in accordance with the terms of this Reference Offer.
- 15.6 Fiberklaar and Operator shall, each at its own expense, maintain in effect such insurance policies with a reputable third party insurance company as it is required to hold under regulations applicable to them and such other policies, at such coverage limits, as a prudent business conducting similar operations would maintain.
- 15.7 The insurance policies of Fiberklaar and Operator shall include, at least, the following minimum cover:
- a) public liability insurance in respect of loss or injury to persons or damage to tangible property with a minimum level of cover of 1,000,000 EUR for any one claim and in all;
  - b) professional faults and errors insurance with a minimum level of cover of 1,000,000 EUR for any one claim and all; and
  - c) mandatory occupational (work) accidents insurance.
- 15.8 Fiberklaar and Operator shall ensure that their respective insurance policies cover damages occurring up to seven (7) years after the end of the agreement, provided that such damages were caused by an incident that occurred during the term of the agreement.

## 16. Force Majeure

- 16.1 Neither Fiberklaar nor Operator shall be liable for any delay or failure to perform its obligations under this Reference Offer if such delay is due to a Force Majeure Event, other than payment of the Charges.
- 16.2 If the delay or failure by a party to perform its obligations, other than ancillary services, due to a Force Majeure Event exceeds sixty (60) consecutive calendar days, after having been notified in writing by the party suffering the Force Majeure Event, either party may immediately terminate the Service Orders affected by such Event of Force Majeure by providing notice in writing to the other party.

## 17. Term, suspension and termination

### **Term**

- 17.1 *[Intentionally left Blank]*

### **Suspension of Access**

- 17.2 Fiberklaar shall not be entitled to fully or partially suspend Access, the provision of one or more Services and its obligations under this Reference Offer, except, after having duly informed the BIPT:
- a) as reasonably required to safeguard the stability or integrity of the FTTx Network and/or avoid any other severe adverse effect on the FTTx Network;
  - b) either or both Parties are required to do so pursuant to a mandatory decision by a Regulator or pursuant to a decision of a competent court and provided that such decision (i) has been disclosed to the other party and (ii) is final, conclusive and binding;
  - c) in case of non-payment of any undisputed Charges set out in article 13 if the unpaid overdue amounts amount to 10% of the Charges invoiced by the Fiberklaar to the Operator in the preceding year and non-payment continues after fifteen (15) days of Fiberklaar having notified the Operator that the Access will be suspended on expiry of such fifteen (15) days period, unless the full and outstanding unpaid overdue amount has been paid by that date; or
  - d) if Fiberklaar has a right of termination under article 17.4 and Fiberklaar has given written notice of such suspension to the Operator, with the understanding that a breach as set out in article 17.4 can only lead to suspension after fifteen (15) days of Fiberklaar having notified the Operator that the Access will be suspended on expiry of such fifteen (15) days period and, where applicable, the Operator has failed to remedy such breach within the fifteen (15) day period.
- 17.3 The suspension referred to in article 17.2 shall not go beyond that part of the FTTx Network which is reasonably required and shall be limited to the Access Points to which the grounds to suspension mentioned in article 17.2 relate and not in respect of any other Access Points. The extent and duration of the suspension will continue until such time as the Operator satisfies Fiberklaar that the reason for which Fiberklaar was entitled to so suspend, no longer applies.

### **Termination for cause**

- 17.4 Either party ("**Terminating Party**") may give notice to terminate the agreement to be entered into between Fiberklaar and Operator if:
- a) the other party commits a material breach of its obligations under articles 3 (Operator's Access to the

FTTx Network), 4 (Operator's use of the FTTx Network), 13 (Charges and payment) and 15 (Liability and indemnity), with the exception of articles 15.1 to 15.4, of the Reference Offer, which resulted in a material adverse impact on the Terminating Party, and either:

- i. the breach is not capable of remedy;
  - ii. the breach is capable of remedy and the other party has failed to remedy that breach within thirty (30) days after receiving written notice requiring it to do so. If the Terminating Party has given a written notice requiring remedy of the same or a similar breach within the previous ninety (90) days, it may give notice to terminate under this article without allowing an additional remedy period;
- b) the other party's breach of its obligations resulting in a Regulator imposing regulatory sanctions upon the Terminating Party that render impossible the performance by the Terminating Party of its material obligations and that other party has not remedied the breach within a reasonable time (or within the time stipulated in any notice from the Regulator);
  - c) if the other party has filed a petition for its own bankruptcy or has requested protection against creditors under the Act on Continuity of Enterprises as embedded in Book XX of the Code Economical Law, has been declared bankrupt or granted a moratorium on payments, if an administrator or trustee has been appointed for the other party's business, if the other party enters into liquidation, or is otherwise no longer able to fulfil its payment obligations towards its creditors;
  - d) if the other party loses any regulatory approval which is necessary in order to enable it to provide (in the case of Fiberklaar) or receive (in the case of the Operator) the Access or the Services.

### ***Term and termination of Service Orders***

17.5 The term and termination of Service Orders shall be governed by the provisions of the agreement to be entered into between Fiberklaar and Operator.

## 18. Access Point Portability

In the event that a Subscriber in respect of an Access Point requests to change Service Provider ("**Access Point Portability**"), Fiberklaar and Operator agree to comply with the procedure set forth in Annex 2 - Service Description to Reference offer concerning the use of passive fiberglass networks.

## 19. Intellectual Property Rights

19.1 All Intellectual Property Rights with regard to goods (including in this context in any case also products, services and software, everything in the broadest sense of the word) that a party uses in the context of this Reference Offer remains vested in that party or with the party from whom that party has received the user rights to this. This Reference Offer does not imply that a license or other right is given or obtained with regard to any Intellectual Property Right, unless expressly agreed in writing.

## 20. Confidentiality

20.1 Except to the extent set out in this article 20 or otherwise expressly permitted in this Reference Offer, each party shall:

- a) treat the other party's Confidential Information as confidential;
- b) use the other party's Confidential Information solely for the specific purpose or purposes for which



- it was disclosed;
- c) not publish or otherwise disclose to any person the other party's Confidential Information without the owner's prior written consent other than to Affiliates, officers, staff, agents, consultants and contractors which have a need to know in connection with this Reference Offer and have agreed to be bound by a duty of confidentiality relating to the Confidential Information at least as stringent as the obligations and covenants in this article 20; and
  - d) take all action reasonably necessary to secure the other party's Confidential Information against theft, loss or unauthorised disclosure.
- 20.2 Each party may disclose Confidential Information which would otherwise be subject to article 20 but only if it can demonstrate that:
- a) such disclosure is required by law or by order of a court of competent jurisdiction or pursuant to a binding order or direction of a regulatory, competition, tax or fiscal authority or other authority or regulator; or
  - b) the Confidential Information is lawfully in the receiving party's possession without an obligation restricting disclosure at the time of receipt from the disclosing party;
  - c) on a date prior to disclosure being made, the Confidential Information becomes part of the public domain, other than through a breach of article 20; or
  - d) disclosure to the receiving party's professional advisors is necessary for the purposes of receiving professional advice in relation to the Reference Offer,
- provided always that the onus shall be on the party disclosing the Confidential Information to prove that the disclosure is pursuant to article 20.2. The above is without prejudice to the possibility for each party to communicate with BIPT in accordance with applicable laws.
- 20.3 All Confidential Information shall remain the property of the disclosing party, shall only be used by the receiving party for the execution of the Reference Offer and/or a Service Order, and such Confidential Information, including all copies thereof, shall be returned to the disclosing party or destroyed after the receiving party's need for it has expired or upon the first request of the disclosing party.
- 20.4 Upon termination of subscription to this Reference Offer, each party's right to use the other party's Confidential Information terminates.

## 21. Compliance

### ***Regulations and Policies***

- 21.1 Fiberklaar and Operator shall comply with all Regulations at all times when performing its obligations under this Reference Offer, insofar as such Regulations apply to such performance. Each party shall ensure it has, and shall have throughout the term of the agreement to be entered into between Fiberklaar and Operator, all necessary permits, licences, authorisations and consents necessary to perform its obligations under this Reference Offer.
- 21.2 Fiberklaar shall perform its obligations under this Reference Offer so that the Operator complies with all Regulations, to the extent Operator's compliance with the Regulations is dependent on the proper performance of Fiberklaar's obligations.

- 21.3 Either party shall advise the other party immediately if it becomes aware of any (actual or potential) non-compliance by the other party with any Regulations. If such an event occurs, Fiberklaar and Operator shall promptly share with each other any information that they reasonably require for the purposes of any further investigation of such (actual or potential) non-compliance.
- 21.4 Fiberklaar and Operator will in good faith share with each other those of their respective policies, standards and processes they deem relevant for the purpose of this Reference Offer or for the performance of the parties' obligations under this Reference Offer.
- 21.5 Each party shall have its own policy on corporate social responsibility, which shall be aligned with the policies on corporate social responsibility of the other party to the extent it directly affects the operation of this Reference Offer.
- 21.6 To the extent applicable and permitted by law, Fiberklaar shall support the Operator in complying with its obligations in respect of lawful interception and mandatory cooperation with law enforcement, intelligence, security and other authorities (“wettelijke medewerkingsplicht” / “obligation de collaboration légale”).

## 22. Audit

- 22.1 Upon the conditions set out hereunder, Operator may (via authorised agents appointed in accordance with article 22.3) audit Fiberklaar's compliance with article 24 (Personal data and privacy) and article 9 (Service quality: Service Levels and Service Credits).
- 22.2 Where an audit is requested by a Regulator, either directly to Fiberklaar or to Operator which can only comply with such request by carrying out an audit of Fiberklaar, an audit may be carried out upon a reasonable prior notice as indicated by such Regulator and Fiberklaar shall take reasonable efforts to cooperate. In all other circumstances, an audit can only be done once, for a maximum of three (3) Business Days per Contract Year, and the auditing Party shall provide at least ten (10) Business Days' notice to the audited Party prior to any audit being conducted. The notification shall indicate the subject of the audit, the objectives thereof, the full name of the Auditor(s), and the expected duration of the audit.
- 22.3 The auditing party must engage third party advisers (“**Auditors**”) that are nationally recognised who are not competitors of the audited Party, to undertake any audit amongst the following general auditing companies: KPMG, PWC, EY, Deloitte or BDO. The auditing party shall require such third party Auditors to be bound to respect professional secrecy and impartiality.
- 22.4 In exercising its rights under article 22.1 the auditing Party shall use reasonable endeavours to:
- (a) ensure that any audit, inspection or verification is conducted during Business Days and ordinary office hours (or as otherwise agreed by the parties from time to time);
  - (b) as far as is commercially practicable, use reasonable efforts to avoid any disruption to the audited party's business; and

- (c) procure that any Auditor (other than its personnel or a Regulator) enters into a non-disclosure undertaking. In the non-disclosure undertaking the Auditors undertake not to communicate to the auditing party any information to which they may have access during the performance of the audit and which may be covered by confidentiality under article 20, nor any commercially sensitive information, with the exception of that information pertaining to any Event of Default in its contractual obligations which are the subject of the audit. The auditing party shall send a copy of the non-disclosure undertaking to the audited party at least 5 Business Days prior to the date of the audit.
- 22.5 In addition to its right to conduct an audit under article 22.1 the auditing party may, by 24 hours' notice, at any time (and immediately by notice if a Regulator requires it), require the audited party to allow the auditing party to provide information to audit the internal control environment of the audited party used to provide the Services as far as it relates to the areas that can be audited as set out in article 22.1. For the avoidance of any doubt, such access shall not include any internal quality control and internal audit documents and reports which are intended to be used by the audited party only. Intrusion tests into Fiberklaar's FTTx Network shall not be authorised and are excluded from the framework of any audit.
- 22.6 All audits, inspections or verifications referred to in this article 22 shall be at the auditing party's cost and expense. The Operator shall bear and as the case may be shall indemnify Fiberklaar for all reasonable costs of Fiberklaar in rendering assistance required under this article 22.
- 22.7 The audited party shall promptly and fully address in good faith any adverse issues arising from an audit which relate to the audited party's performance of its other obligations under this Reference Offer including addressing any revealed discrepancies, errors, inaccuracies or oversights of any kind.
- 22.8 Fiberklaar and Operator will ensure throughout any audit process that may be conducted pursuant to this article 22 that no communication of confidential and/or commercially sensitive information related to third parties is exchanged or becomes available to the other party. Fiberklaar and Operator will ensure that this obligation is complied with when the audit process is conducted by an authorised agent or a third party auditor.

## 23. No Partnership

- 23.1 Nothing contained in the Reference Offer and/or a Service Order may be deemed to constitute the establishment of a cooperation, a partnership, association, joint venture, any other co-operative entity or agency agreement between the parties for any purpose.

## 24. Personal data and privacy

- 24.1 Each Party shall provide to the other Party correct contact data, such as, for example, name, address and contact details for the performance of this Reference Offer. Any changes shall be notified by each Party to the other Party in writing in a timely manner after former Party has become aware of the change.
- 24.2 When processing personal data under or in connection with this Reference Offer each party shall comply with the provisions set out Annex 6.

- 24.3 In the event Fiberklaar provides the use of IP addresses in order to facilitate the rendering of the Service, such IP addresses shall remain the property of Fiberklaar and may be amended at any time. Fiberklaar shall notify any amendment in advance.
- 24.4 In the event the agreement to be entered into between Fiberklaar and Operator and/or the Access or Service is terminated, for whatever reason, Fiberklaar may, where applicable, withdraw all identification data, IP addresses and/or codes immediately following the termination of the agreement and/or Service.

## 25. Dispute Resolution Procedure

- 25.1 Any dispute, claim or controversy arising out of or in connection with this Reference Offer or any document agreed or contemplated as being agreed pursuant to this Reference Offer (a "Dispute") shall be resolved in accordance with this article, without prejudice to the intervention of the Regulator pursuant to applicable law.
- 25.2 Fiberklaar and Operator shall use all reasonable efforts to amicably resolve any dispute. Fiberklaar and Operator shall, at a minimum, use the following procedure in the event a dispute arises. Upon written notification that a dispute exists, working level managers of each Fiberklaar and Operator shall attempt in good faith to work out a resolution within thirty (30) calendar days following the day of written notification of a dispute.
- 25.3 If an agreement cannot be reached by the end of such period, Fiberklaar and Operator shall prepare a document containing information that is designed to assist resolution of the dispute containing what has been agreed and what remains in dispute between them. No later than ten (10) Business Days thereafter, or at some other time as mutually agreed by Fiberklaar and Operator, representatives of Fiberklaar and Operator at CEO level shall meet to further attempt to resolve the matter or to agree on a course of action to resolve the matter. Such course of action may include use of formal dispute resolution processes, including but not limited to non-binding mediation or binding or non-binding arbitration.

## 26. Assignment

- 26.1 A party will not assign, transfer, or otherwise dispose all or part of its rights and obligations under this Reference Offer without the prior written consent of the other party, which consent shall not be unreasonably withheld. Any attempted assignment without such prior written consent shall be void *ab initio*.
- 26.2 Each party is authorised - without the consent of the other party - to assign, transfer, or otherwise dispose all or part of its rights and obligations under this Reference Offer, to Affiliates or to a successor in interest, to substantiate all of its business to which the subject matter of the Reference Offer relates, or to a successor to more than one half of its assets or to a majority owner subsidiary or a majority owner of said party.

## 27. Miscellaneous

- 27.1 All notices given under this Reference Offer shall be in writing and in English, unless the parties agree otherwise or local law and regulations provide otherwise, and shall be sent by prepaid post or by electronic mail to the other party at the address, or email address set out in the agreement to be entered

into between Fiberklaar and Operator, or any other address notified from time to time including as updated in an order.

- 27.2 Notices given under this Reference Offer are deemed to be given by the sender and received by the addressee: (a) if sent by prepaid post, three (3) Business Days from and including the date of postage; or (b) if sent by electronic mail, when sent to the addressee.
- 27.3 A party, nor anyone acting on its behalf, shall publish, distribute or otherwise disseminate any press release, advertising or publicity matter having any reference to the other party or the other party's names, marks, codes, drawings, specifications or other references to the latter party, unless and until such matter shall have first been submitted to and approved in writing by the first party. Unless explicitly otherwise agreed upon in writing, a party shall not publicly refer to the other party for its own commercial purposes.
- 27.4 Any dispute relating to or concerning this Reference Offer shall be governed by and construed exclusively in accordance with the laws of Belgium. Any dispute related to this Reference Offer shall be brought before the courts of the registered office of Fiberklaar, unless it is handled via a conciliation or dispute settlement procedure with BIPT.

Annex 1 – Commercial conditions and charges

Annex 2 – Service Description and Working Level Agreement

Annex 2.1 – Technical Description to Reference offer concerning the use of passive fiberglass networks

Annex 2.2 – Ordering and Delivery (O&D) to Reference offer concerning the use of passive fiberglass networks

Annex 2.3 – Repair & Maintenance (R&M) to Reference offer concerning the use of passive fiberglass networks

Annex 2.4 – Operational Interfaces to Reference offer concerning the use of passive fiberglass networks

Annex 3 – Service Level Agreement (SLA)

Annex 4 – Deployment projection

Annex 5 – Commercial campaigning principles

Annex 6 – Data Protection

## Annex 1 - Commercial conditions and charges on Wholesale ODF Access

**Annex 1. - Commercial conditions and charges**

**ON WHOLESALE ODF ACCESS**

**version 1.0**

**(‘ODF-ACCESS’)**



## 1. General

Capitalised terms and expressions in this Annex 1 shall have the meaning as defined in Article 1 of the Reference Offer.

This Annex 1 sets out the principle and charges of the Pricing Model applied by the Fiberklaar for the year 2023. The commercial conditions as set forth in this Annex 1 only apply to the network Services under the present Reference Offer. The commercial conditions for other than dense Fiber-to-the-Premises/Homes/Building network Services (e.g. dedicated SLA, point to point dedicated B2B fibres, connectivity for mobile sites/antennas, etc.) will be set out in a specific business pricing plan and a separate customer agreement to be entered into by Fiberklaar and Operator.

All amounts in this Annex 1 are excluding VAT. The invoice specifications are included in Exhibit 1.1.

In the event of disputes about invoiced amounts, the interest as included in the Invoicing schedule will be charged in accordance with the provisions of the Invoicing exhibit 1.1.

A Charge can be FFO (Fee for Once), or FFS (Fee for Subscription). The FFO Charges are charged once and the FFS Charges are charged periodically in accordance with the description in the Invoicing exhibit 1.1.

## 2. FFO Charges

### 2.1. FFO Charges – Homes Connection Charge

Element of Charges	One-off payment for 2023
One-off charge for first activation of a Premise	[CONFIDENTIAL]

Fiberklaar will do the home connections either during construction of Homes Passed or after construction when Operator wants to activate a Premise which has not yet the Homes Connected status. This passive termination cost will partially be charged as one-off to the Operator for its activated customers, the remaining part will be included in the ODF Access Fee to the Operator.

#### Determination of the one-off charge to be paid by Operator

The one-off charge for the homes connections is determined based on the below formula:

$$C_{op} = P_i * C_{x,y}$$

$$C_{x,y} = C_x + (C_{x+1} - C_x) * Y/12$$

Where

$C_{op}$  : one-off amount charged to Operator for the activation of the Operator's customer on the Network

$P_i$  : the one-off charge for a Premise that is for the first time activated on the Network being [CONFIDENTIAL] (as of 2023 and indexed according to title 4 Indexation of Charges)

$C_{x,y}$  : the multiplier coefficient taken into account the number of years X and number of months Y between the moment the Premise was activated for the first time on the Network and the moment the Operator wants to activate its customer on a Premise (for the avoidance of doubt, such multiplier will not apply to the first activation as this will be [CONFIDENTIAL] irrespective of the time between connection and first activation),

$C_x$  : the coefficient which is defined per number of years X as per below table

Compensation mechanism for Operator in case of churn of Operator’s customer

The Operator gets a compensation if its customer churns to a competitor:

- a. If the Premise remains activated on the Network, the Operator receives this compensation at the moment of the churn
- b. If the Premise is des-activated from the Network, the Operator receives this compensation at the moment the Premise is again activated on the Network

The amount of the compensation will be calculated by the following formula:

$$R_{op} = P_i * R_{x,y}$$

$$R_{x,y} = R_x + (R_{x+1} - R_x) * Y/12$$

Where

$R_{op}$  : the compensation in case of churn of customer with respect to the one-off amount which was charged to Operator for the activation of the Operator’s customer on the Network

$P_i$  : the one-off charge for a Premise that is for the first time activated on the Network, being [CONFIDENTIAL] (as of 2023 and indexed according to title 4 Indexation of Charges)

$R_{x,y}$  : the multiplier coefficient taken into account the number of years X and number of months Y between the moment the Premise was activated for the first time on the Network and the moment the Premise is re-activated after churn of the Operators’ customer. The latter being:

- The moment the customer churns if the customer churns to an Operator active on the Network and the Premise remains activated on the Network
- The moment the Premise is re-activated on the Network if the customer churns to another Operator which is not active on the Network and therefore the Premise was des-activated from the Network for a certain period of time

$R_x$  : the coefficient which is defined per year X as per below table

Year X	$C_x / R_x$
0	1,000
1	0,967
2	0,933
3	0,900
4	0,867
5	0,833

6	0,800
7	0,767
8	0,733
9	0,700
10	0,667
11	0,633
12	0,600
13	0,567
14	0,533
15	0,500
16	0,467
17	0,433
18	0,400
19	0,367
20	0,333
21	0,300
22	0,267
23	0,233
24	0,200
25	0,167
26	0,133
27	0,100
28	0,067
29	0,033
Subcontracting	

Example of the above charges and compensation mechanism

Operator A activates its customer in November 2023 on the network. After 4 years and 11 months September 2028) this customer churns to Operator B but remains on the platform (Premise remains a Homes Activated).

- Company charges the one-off charge for first activation to Operator A at moment the Premise becomes the first time activated on the platform [CONFIDENTIAL]
- When customer churns to Operator B:
  - Operator B needs to pay a one-off charge equal to [CONFIDENTIAL]
  - Operator A gets compensation of [CONFIDENTIAL] (i.e. the same amount as Operator B is charged)

Assumptions

- $P_i * 100$
- First time activation by Operator A mmyy
- (=Y0) 1123
- Churn to Operator B mmyy 0928
- $R_x 0,867$

- $R_{x+1}$  0,833
- X (years) 4
- Y (months) 11

Compensation Operator B -> Operator A in 09/2028

- $R_{op} = P_i * R_{X,Y}$  83,58
- $R_{X,Y} = R_X + (R_{X+1} - R_X) * Y/12$  0,836

**2.2. FFO Charges – Patching and Portability**

Element of Charges	One-off payment for 2023
Charge for patching (in PoPs), per Premise	[CONFIDENTIAL]
Charge for depatching (in PoPs), per Premise	[CONFIDENTIAL]
Portability (per Connection)	[CONFIDENTIAL]

Table 1: FFO Charges – Patching and Portability

A one-off patching Charge will be charged by Fiberklaar to Operator for the patching/depatching of a Home Activated. For the avoidance of doubt, this patching Charge will only be applied when the order is reported as ready.

**2.3. FFO Charges – Contribution Central PoP and Area PoP**

Element of Charges	One-off payment for 2023
Central PoP and Area PoP	[CONFIDENTIAL]

The one-off FFO Charge will be charged by Fiberklaar to Operator at the time of the first patch order. The one-off connection contribution of [CONFIDENTIAL], will be divided over the number of operators in the Area PoP or Central PoP. In the event of a subsequent entry of a new operator, the one-off contribution for the operators who joined previously will be recalculated and adjusted downwards. If on the same Area PoP or Central PoP a second operator becomes active, the first operator will be reimbursed  $[CONFIDENTIAL] / 2 = [CONFIDENTIAL]$ .

**3. FFS Charges**

Fiberklaar shall calculate the aggregate of the FFS payable by Operator on a monthly basis over each Deployment Area on the basis of the number of Homes Activated for which a Service Order for Access has been submitted by Operator.

**3.1. FFS Charges – Connection rent and volume discount**

The ODF Access Fee is determined based on the below table, where each ODF Capex Class (number 1 till 15) has its own recurring charge. The classification of a Deployment Area into these capex classes is based on the net capex per Deployment Area divided by the number of Homes Passed. This net capex includes both the Homes Passed and Homes Connect capex minus the one-off connection fees received from the Service Providers. The average rate for the Network of Fiberklaar is then determined by the weighted average of all the Deployment

Areas which are completed and the Deployment Areas which will become available in the following year, as agreed upon in the Deployment Plan.

The weighted average ODF Access Fee for year  $n+1$  will be calculated using the capex spend of the actual year-to-date Deployment Areas + the planned deployment for year  $n+1$  included in the project business case as per latest available Toll Gate – the actual one-off connection revenues received from the Service Providers – the planned one-off connection revenues that will be received from the Service Providers based on the latest available business case/plan, applying the ODF Access Fees from the ODF Capex Class Table.

For 2023, the ODF Access Fee will be based on the Deployment Areas that are planned to become available by end 2023.

The Lower and Upper bound of the ODF Capex Classes as reflected in the table below will be adjusted annually to adjust in line with the index for cost of reference wages (*referteloonkost*) (country average level) ("**Index**") published by Agoria in accordance with the following formula:

$$I_1 = I_0 (0.20 + 0.80 * X_1/X_0)$$

where:

$I_1$  = new value of the lower or upper bound (applicable as from 1 January of such following calendar year);

$I_0$  = current value of the bound (the last indexed value);

$X_1$  = Index for the month of September immediately preceding 1 January on which the new indexation will take place;

$X_0$  = Index for the month of September preceding the month of September referred to in  $X_1$ , provided that indexation will never be negative.

ODF Capex Class Table and associated ODF fee for 2023				
Capex classes	Lower bound Capex per HP	Upper bound Capex per HP	ODF (excl. volume discount)	ODF (incl. 11% volume discount)*
<i>ODF fees for 2023, not considering indexation</i>				
1	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
2	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
3	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
4	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
5	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
6	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
7	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
8	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
9	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
10	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
11	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
12	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
13	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
14	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
15	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]

Table 2: ODF Capex Classes and associated ODF fee

\*The standard volume discount of 11% can still be subject to change to be determined by Fiberklaar in a non-discriminatory way depending upon effective overall FTTx Network utilization.

*Capex classes*

In the case that ODF Capex Classes are used belonging to a Capex Class lower than [CONFIDENTIAL] or higher than [CONFIDENTIAL] per Homes Passed, one or more adjacent Capex Classes will be used of [CONFIDENTIAL] each (before indexation of Capex Classes). The corresponding ODF Access fee will then be on average [CONFIDENTIAL] (excl. volume discount) per Home Activated lower or higher respectively.

*Capex class and determination of Charges*

The final Capex Class (number 1-15) of a Deployment Area is determined based on the ODF Capex Class Table which is applicable for the year the Deployment Area is Delivered and based on the actual costs. Any subsequent changes in the net capex (either due to additional HP capex, HC capex or subsequent one-off connection fees received from the Service Providers) will be adjusted for inflation when recalculating the updated net capex per Delivered Deployment Area/number of HP. This updated net capex per Delivered Deployment Area/number of HP will then be mapped on the Capex Class Table which was applicable for the year the Deployment Area was delivered. The capex class that results from this mapping defines the ODF fee that is applicable for such deployment area, acknowledging that the ODF tariff needs to be indexed for the years between the year of deployment and the year of invoice.

The discount factor to use for this adjustment is the following:

$$D_n = (0.20 + 0.80 * X_n/X_{n-1}) * (0.20 + 0.80 * X_{n-1}/X_{n-2}) * \dots$$

$D_n$  = discount factor applicable for subsequent net capex movements  $n$  years later than the Year a Deployment Area is Delivered

$X_0$  = Index for the month of September immediately preceding 1 January of the year a Deployment Area is delivered; and

$X_n$  = Index for the month of September preceding the 1 January  $n$  years after the year a Deployment Area is delivered

Where  $n$  is equal to or greater than 1 and given that negative indexations will not be taken into account

Example of how this discounting will work:

Year	n	n+1	n+2	n+3
<b>Net Capex Deployment Area</b>	[CONFIDENTIAL]		[CONFIDENTIAL]	[CONFIDENTIAL]
Discounted Net Capex	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
Cumulative Net Capex discounted	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
Indexation (based on formula)		[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
Discount factor	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
<b>Capex class Table</b>				
Lower bound class 1	[CONFIDENTIAL]			
Upper bound class 1	[CONFIDENTIAL]			
Lower bound class 2	[CONFIDENTIAL]			
Upper bound class 2	[CONFIDENTIAL]			
<b>Capex Class of Deployment Area</b>	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]

Year  $n$  = deployment area delivered (no indexation yet compared to capex classes in the agreement)

Table 3: example on discounting subsequent changes to net capex after delivery of deployment area





Example :

<b>Capex per Deployment Area</b>			
<b>Initial roll-out</b>	<b>Number of HP/HC</b>	<b>Net Capex per Deployment Area</b>	<b>Net Capex per Deployment Area/ number of HP</b>
HP capex	[CONFIDENTIAL]	[CONFIDENTIAL]	
Net HC capex*	[CONFIDENTIAL]	[CONFIDENTIAL]	
<b>Cumulative capex EOY 1</b>		[CONFIDENTIAL]	[CONFIDENTIAL]
<b>New connections</b>	<b>Number of HP/HC</b>	<b>Net Capex per Deployment Area</b>	<b>Net Capex per Deployment Area/ number of HP</b>
Net HC capex* year 2	[CONFIDENTIAL]	[CONFIDENTIAL]	
<b>Cumulative capex EOY 2</b>		[CONFIDENTIAL]	[CONFIDENTIAL]

\* Net HC capex = gross HC capex -/- connection fees received from ISPs

The net HC Capex in the table above is equal to the Gross HC Capex minus the ISP contribution for the connection fee of [CONFIDENTIAL] per Home Activated.

ODF Access Fee for 2023

Average ODF Access Fee	2023
ODF Access fee per Home Activated incl. volume discount	[CONFIDENTIAL]

The standard volume discount is 11% and can still be subject to change to be determined by Fiberklaar in a non-discriminatory way depending upon effective overall FTTx Network utilization.

### 3.2. FFS Charges – PoP services

Element of Charges	Recurring payment
WP/LC colocation	[CONFIDENTIAL] <sup>1</sup>
City Ring fibers	[CONFIDENTIAL] <sup>2</sup>
LC colocation	[CONFIDENTIAL] <sup>3</sup>

<sup>1</sup> Compensation is included in the monthly wholesale ODF charge

<sup>2</sup> Compensation is included in the monthly wholesale ODF charge

<sup>3</sup> Compensation is included in the monthly wholesale ODF charge

<sup>3</sup> Compensation is included in the monthly wholesale ODF charge

### 3.3. FFS Charges – Energy Charges

Energy Charges of the WP/LC for the full Fiberklaar Footprint will be recharged at cost to the operators. Each year, Fiberklaar will retroactively determine the actual energy costs and divide these in proportion to the number of Homes Activated per Operator.

The energy Charge shall be set annually and is an advance payment Charge.

Element of Charges	2023
Advance payment Charge energy (per Homes Activated)	[CONFIDENTIAL]

Table 4: FFS Energy Charges

Based on the full Fiberklaar Footprint, Fiberklaar will provide the Operator with a yearly settlement of any deficit or surplus of the advance payment and the actual energy costs for the Homes Activated per Operator.

Fiberklaar will inform the Operator in Q4 about the advance payment charge for the subsequent year.

### 3.4. FFS Charges – Service Level Agreement

The Enhanced/Premium SLA for repair is described in Annex 3 Service Level Agreement (SLA) to Reference offer concerning the use of passive fiberglass networks and provides for a number of improved KPIs. Repair time frames are enhanced for the Access Points for which Operator has ordered an Enhanced/Premium SLA as described in Annex 3 Service Level Agreement (SLA) to Reference offer concerning the use of passive fiberglass networks. A Platinum SLA which targets improved repair timers, will be discussed and agreed by the Parties after the Closing Date. The Enhanced/Premium/Platinum SLA option can be ordered per Access Point.

Element of Charges	Monthly Recurring payment for 2023
Basic SLA	[CONFIDENTIAL]
ISLA Enhanced	[CONFIDENTIAL]
ISLA Premium	[CONFIDENTIAL]

---

<sup>4</sup> Compensation is included in the monthly wholesale ODF charge

## 4. Indexation of Charges

The pricing elements of the Charges mentioned in this annex will be adjusted annually to adjust in line with the index for cost of reference wages (*referteloonkost*) (country average level) ("**Index**") published by Agoria in accordance with the following formula:

$$P_1 = P_0 (0.2 + 0.80 * X_1/X_0)$$

where:

$P_1$  = new value of the pricing element (applicable as from 1 January of such following calendar year);

$P_0$  = current value of the pricing element (the last indexed price);

$X_1$  = Index for the month of September immediately preceding 1 January on which the new indexation will take place; and

$X_0$  = Index for the month of September preceding the month of September referred to in  $X_1$ ,

This indexation will be applied on the one-off connection fee for the first activations, but no additional indexation will be applied for any subsequent (re-activations) and as a consequence also not on the compensation in case of churn.

**Exhibit 1.1**

**Invoicing**

**ODF ACCESS SERVICE**

**version 1.0**

This schedule contains the description of the invoicing and payments that form part of this Reference Offer.

## 1. General

- 1.1. Capitalised terms and expressions in this schedule shall have the meaning as defined in Article 1 of the Reference Offer .
- 1.2. This schedule sets out the terms and conditions with regard to invoicing and payment between the Operator and Fiberklaar. Further agreements with regard to invoicing and payment must be agreed between Parties in writing and included in amendments to this schedule, or an amended version thereof.
- 1.4. This schedule describes for the categories of products how Fiberklaar can charge them to Operator.

## 2. Payment

- 2.1. The basis for the invoice is the agreed Charges in accordance with what is included in Annex 1 - Commercial conditions and charges on Wholesale ODF Access multiplied by the number of times that a tariffed activity or service has been performed and reported completed to the ordering party.  
The date of notification of completion via the automated order interface serves as the start and stop dates for invoicing the monthly Charges.  
Invoicing components of the Fiberklaar invoice to Operator can be divided into the following main categories:
  - Fee for Once (FFO)
  - Fee for Subscription (FFS)
- 2.2. The billable components or specifications described in this schedule will form an invoicing line on the invoice for each item. This invoice Information shall be such that the invoice is verifiable for the invoiced Party. The invoice will be sent by e-mail in PDF format. A detailed specification of the invoice will also be made available electronically in a common format.
- 2.3. Operator shall pay the invoice if it contains the invoice components or specifications in accordance with this schedule and also corresponds to the reality of orders, use and performance. A payment term of thirty (30) calendar days after the invoice date as stated on the invoice shall apply.
- 2.4. If Operator has not paid on time, Fiberklaar shall notify this in writing and set an additional term of payment of at least fifteen (15) calendar days. If payment is not made within this additional term, the Operator shall be in default without further notice of default being required. Fiberklaar is then entitled:
  - To charge statutory interest in respect of late payment in commercial transactions (published by the Federal Public Service (FOD/SPF) Finances) and reasonable costs to obtain extrajudicial settlement as from the day following the final day of payment referred to in the first paragraph; and
  - To proceed to put the Connections out of operation in case of non-payment of any undisputed Charges set out in article 13 of the Reference Offer if the unpaid overdue amounts amount to 10% of the Charges invoiced by Fiberklaar to the Operator in the preceding year and non-payment continues after fifteen (15) days of Fiberklaar having notified the Operator that the

Access will be suspended on expiry of such fifteen (15) days period, unless the full and outstanding unpaid overdue amount has been paid by that date.

- 2.5 Objections to amounts charged may only be notified in writing to Fiberklaar no later than 6 months from the invoice date. Payment may not be suspended of that part of the invoiced amount to which no objection has been made. If it is established that payment of any part of the invoiced amount has been wrongly suspended, the Operator will be obliged to pay the amount, increased with the applicable interests.

### 3. Invoicing

- 3.1. FFS Charges components are invoiced on a monthly basis and will be issued at the beginning of the month and concerns the number of the Homes Activated in the preceding month. FFS Charges are due as of date of patch execution until the day of the de-patch order. A standard month of thirty (30) days is used to settle cancellations and new connections in the relevant invoice period.
- 3.2. FFO Charges components shall be invoiced on a monthly basis (or quarterly if the volume is low) and will be issued at the beginning of the month and concerns the number of the Homes Activated in the preceding month (or quarter if the invoice is a quarterly invoice).
- 3.3. The Charges have been agreed in advance and are set out in Annex 1 - Commercial conditions and charges on Wholesale ODF Access, "Commercial conditions and Charges".

### 4. Invoicing address

Fiberklaar will send the invoices arising from this Reference Offer digitally to e-mail address indicated by the Operator

The parties will inform each other in writing in good time, but at least one calendar month in advance, if the invoice address changes.

### 5. Invoicing disputes

- 5.1 An invoice shall be deemed to have been accepted by a party if that party does not dispute the invoice within the payment term.
- 5.2. An invoice dispute exists if a party notifies the other party in writing, describing the dispute as specifically as possible and provides the underlying evidence. The notification of an invoice dispute shall not result in suspension of payment for that part of the invoice to which no objections have been raised.
- 5.3. If an invoice dispute arises, the Dispute Resolution Procedure as set out in article 25 of the Reference Offer shall apply.
- 5.4. If a dispute is notified against an invoice after payment has already taken place, then - if the objections are well-founded and lead to an adjustment of the relevant invoice - an amount that has been overpaid or underpaid shall be set off against Charges due on the next invoice after the overpaid or underpaid amount has been determined by the parties.

- 5.5. If the outcome of the Dispute Resolution Procedure concludes that the disputing party's objection to the invoice is unfounded in whole or in part, the disputing party shall immediately pay the outstanding amount.
- 5.6. If the outcome of the Dispute Resolution Procedure concludes that the disputing party's objection to the invoice is well-founded, the invoicing party shall immediately correct the relevant invoice with the amount determined.

Annex 2 - Service Description to Reference offer concerning the use of passive fiberglass networks



**Annex 2 – Service Description**

**to**

**Reference offer concerning the use of passive fiberglass networks  
version 1.0**

**("ODF ACCESS")**

## Table of Content Annex 2

1	Introduction	43	
1.1	Amendments	43	
2	ODF access overview	43	
2.1	Summary services overview	43	43
2.2	Domain separation	44	
2.3	Network characteristics	45	
2.4	POP layout	46	
2.5	POP Equipment	47	
2.6	Access POP locations	48	
2.7	Quality of service	48	
3	Co location LC	49	
3.1	Co Location	49	
3.2	LC POP details	50	
4	LC WP fiber service	51	
4.1	LC WP Fiber capacity	52	
5	Co location WP	53	
5.1	Co location	53	
5.2	WP POP details	55	
6	Fiber Access Service	56	
6.1	End-user location and connection	56	
6.2	Fiber patching	57	

## 1. Introduction

This document describes Fiberklaar's FTTx network and which parts of the network are within the Operator domain. The purpose of this document is to inform an Operator about the parts of the network relevant to Operator. This document is the Annex Service Description to the ODF reference offer.

This service description describes the delivery of ODF access by Fiberklaar through its ODF territories. the services offered are wholesale services.

In this documentation the building blocks of the ODF Service will be described, whereas there is a distinction between generic attributes and the specific attributes per building block. The distinguished building blocks of the ODF service are the following:

- Chapter 2 describes the overall attributes, including overall architecture;
- Chapter 3 describes the LC Co location;
- Chapter 4 describes the LC WP Fiber;
- Chapter 5 describes the WP Co location;
- Chapter 6 describes the Fiber access part.

### Amendments

If as a result of (announced in accordance with Belgian Law) service introductions, adjustments to the service or process adjustments, this Annex is no longer fully or partially up-to-date, any necessary adjustments to this Annex shall be incorporated into a new version thereof, which automatically replaces the old Annex. In any case, any modification shall be done in consultation between Operator and Fiberklaar and shall be subject to prior approval by BIPT.

## 2. ODF access overview

### 2.1 Summary services overview

The responsibilities within a FTTx network are divided as follows. Fiberklaar designs, builds, manages and operates FTTx networks. Operator provides data transport services across the network and the Service Provider offers services via Operator. This chapter answers the question of what Fiberklaar's network looks like in general terms. It shows which elements are included in Fiberklaar's network, where the Operator domain is located, and which grid surfaces are within the FTTx network.

Fiberklaar will operate a carrier grade-network and facilities that will apply to ETSI standards applicable at roll out. Future changes of ETSI standards will be applied where reasonably possible.

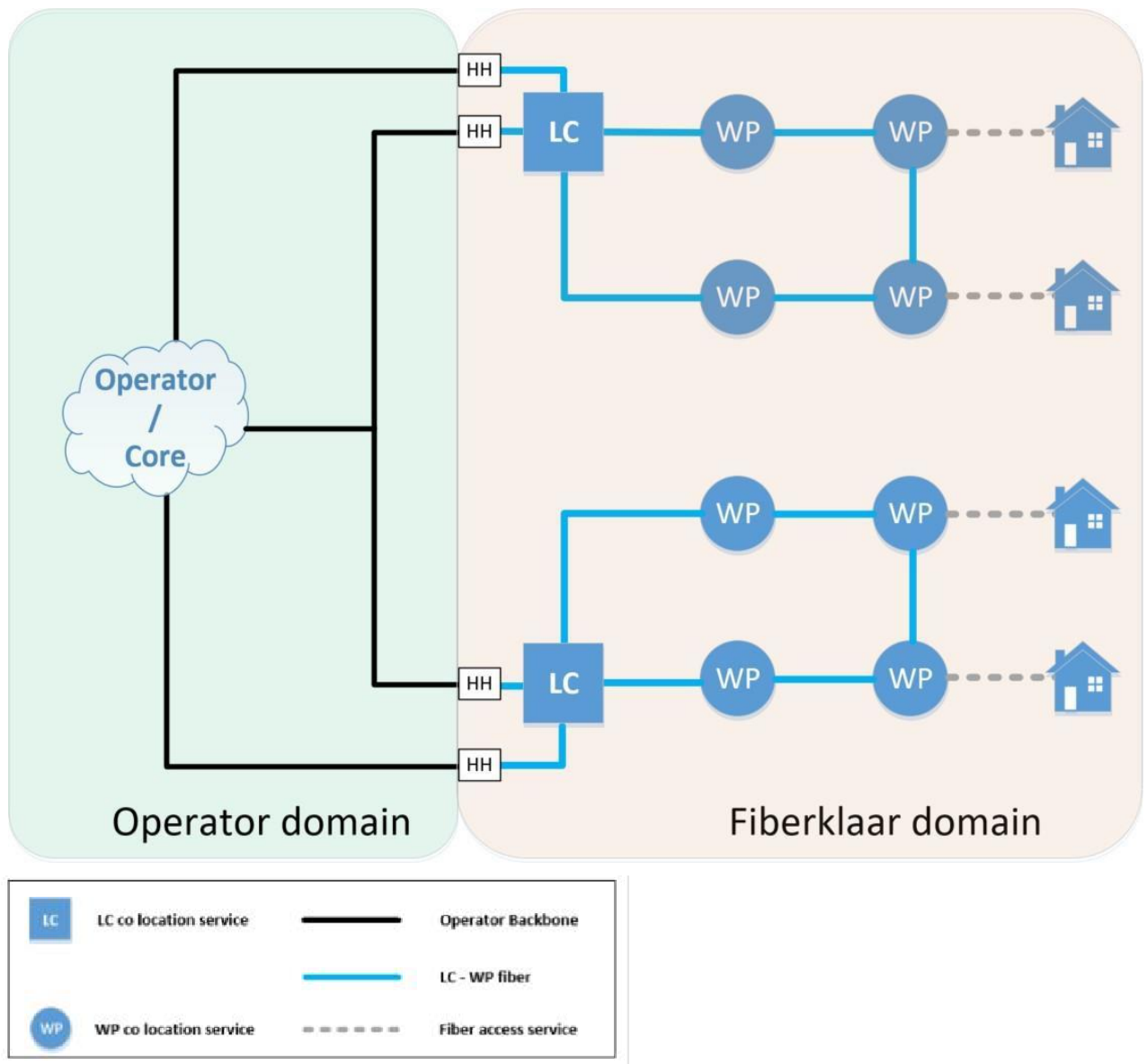


Figure 1 ODF Access service overview

The ODF access service provided to Operator consists of the following subservices and related activities:

- Co location service Wijk PoP (WP);
- Co location service Local Center (LC);
- LC WP fiber service: connection from LC to WP;
- Fiber access service: single fiber connections from WP to FTU.

## 2.2 Domain separation

The figure below is a schematic overview of the components in Fiberklaar's FTTx network including the Domain of Operator and Fiberklaar.

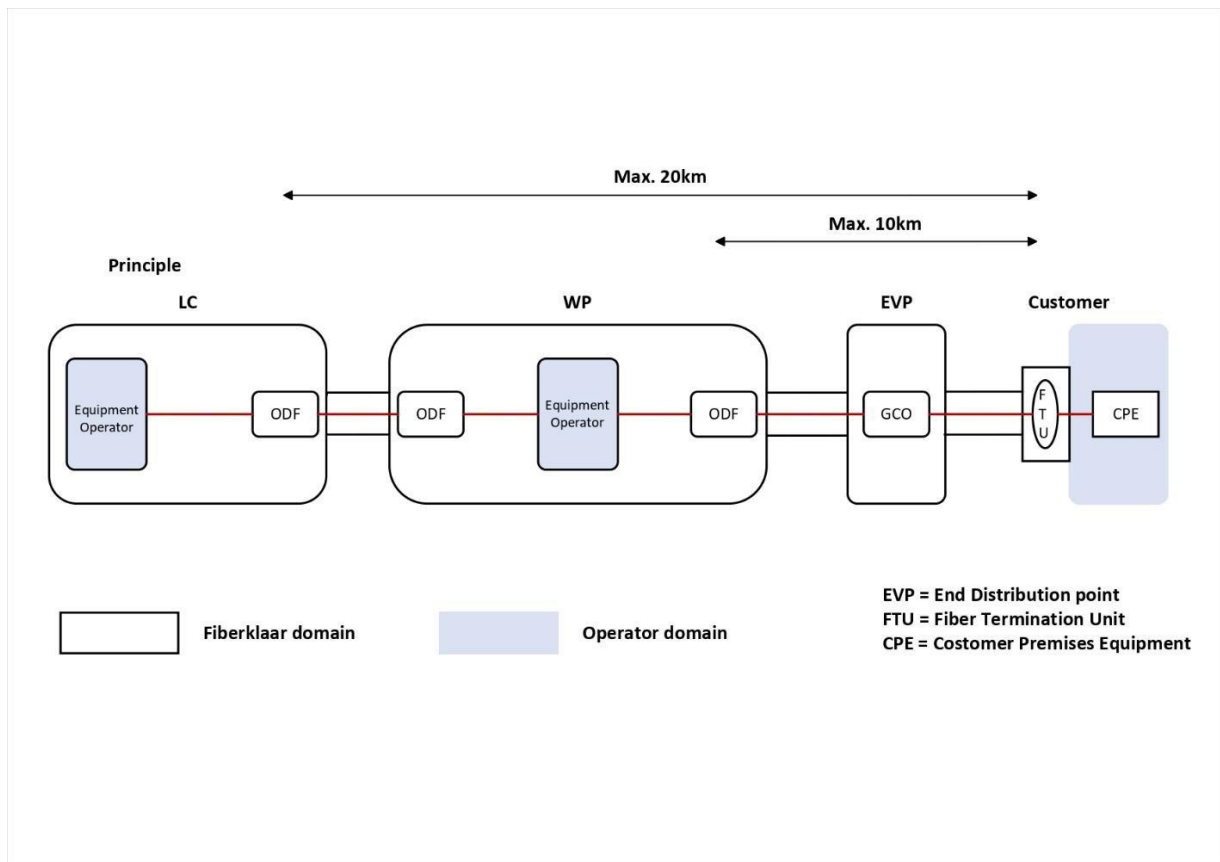


Figure 2 Operator and Fiberklaar domains

Fiberklaar is responsible for the application of and possession of any compulsory government permits, consents and/or exemptions for the use and operation of the network, including the POP's.

Operator is responsible for receiving questions or incidents from the Subscriber and determining which domain the incident is in. If the incident is reasonably in Fiberklaar's domain, it must be passed on to Fiberklaar's NOC on the interface specified by Fiberklaar.

Fiberklaar is responsible for receiving incidents in Fiberklaar's Domain of the ODF area and its settlement. Fiberklaar's NOC will fix the incident. After resolving, the incident will be declared closed to Operator in line with what has been determined for this purpose in the Annex 2.3 – Repair & Maintenance (R&M) to Reference offer concerning the use of passive fiberglass networks.

### 2.3 Network characteristics

#### Network Fiber

The network meets a number of general standards and is designed in such a way that the following quality standards are guaranteed:

- Fiberklaar deploys a network that has optical transmission characteristics compliant with ITU G.984.2 and G.9807.1;
- Fiberklaar aims to build and deliver a network that is (next generation) PON ready. Design rules will lead to the most efficient/short network lengths and dimensioning;

- The permitted fibers in the network of Fiberklaar are of the type Single Mode and meet at least the ITU G.657A1 standard;
- The number of intermediate connectors per link will be kept to a minimum. Splices will be preferred;
- The FTTx network is designed to support both the use of PON- and Point-to-Point equipment. This means that the network takes into account both the length dependencies of Point-to-Point and PON

Fiberklaar's network has optical transmission characteristics compliant with ITU G.984.2 and G.9807.1 and allows a 1/64 splitting ratio if the Operator uses optical equipment with 32 dB power budget and a 1/32 splitting ratio if the Operator uses 28 dB optical equipment.

The deployed network complies with the transparent transport of any wavelength(s) in the range from 1260 nm to 1625 nm for the (NG)PON services and the wavelength band 1625 to 1675 nm (U-band, maintenance band) for in service fiber line testing at 1650 nm (OTDR), as defined in following recommendations:

- ITU-T G.984.5 Gigabit-capable passive optical networks (G.PON) Enhancement band;
- ITU-T L.66 Optical fiber cable maintenance criteria for in-service fiber testing in access networks.

#### 2.4 POP layout

In the architecture of Fiberklaar, two types of POP locations can be distinguished:

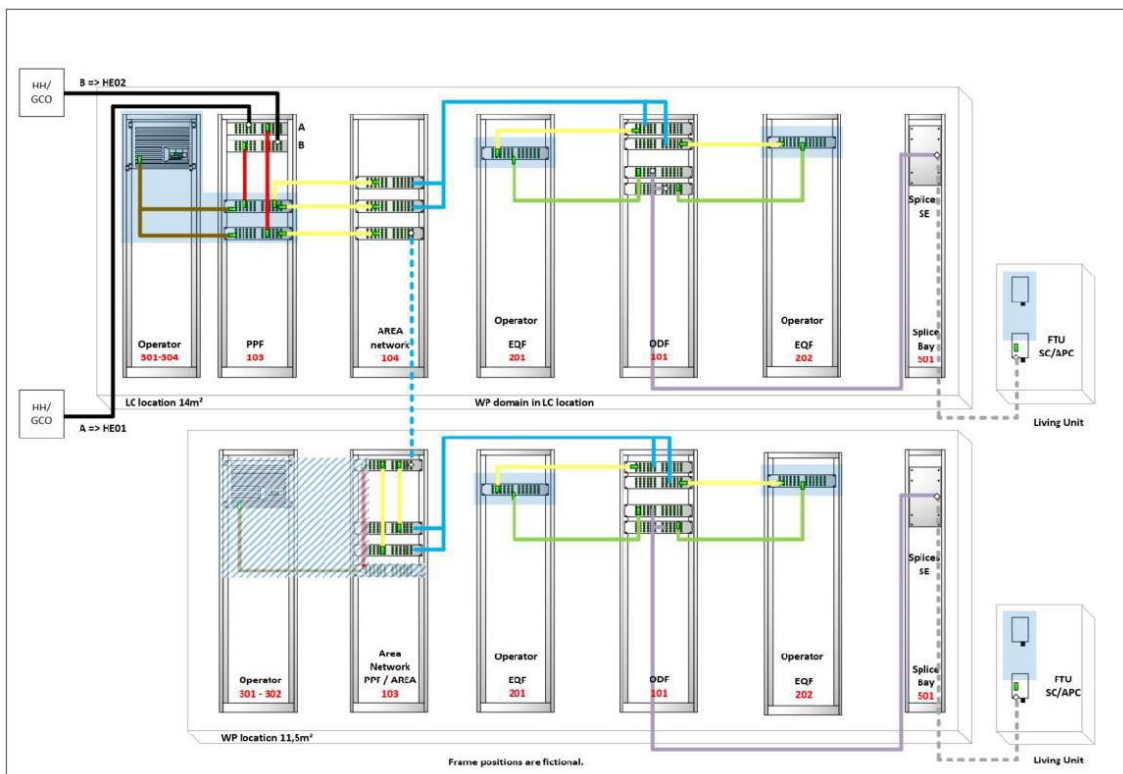
- Local Center (LC)

A LC functions as a connection point for the Operator's backhaul to distribute a city ring. The LC also offers the possibility to install aggregation operator equipment.

- Wijk POP (WP)

A WP is specifically designed for the distribution of access fiber optics cables and the installation of operator equipment. In a WP, fiber optic cables are finished in the patch cabinets. In addition, a WP can be upgraded to a LC by installing aggregation equipment.

A LC also has a WP-function. Name-wise only 'LC' is used, the correct naming is 'LC/WP'.



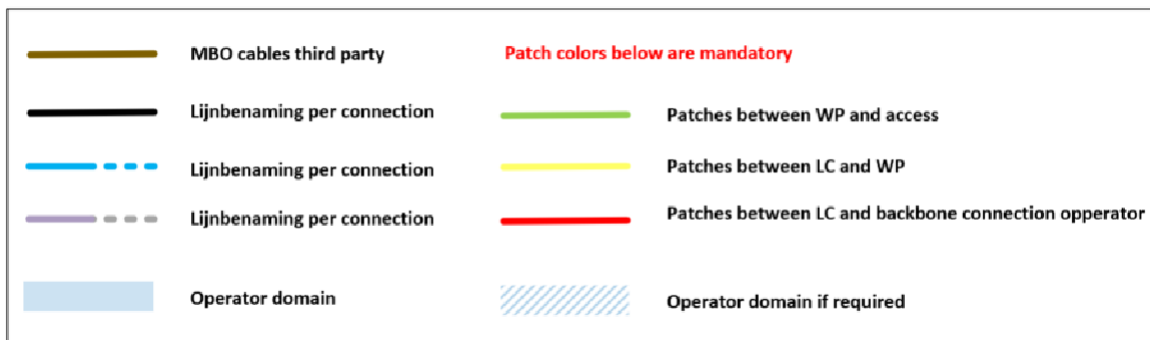


Figure 3 Schematic overview ODF Access service

Operator is responsible for requesting the Co location service in the POP locations (WP and LC) through the appropriate interface. Operator labels its business equipment, making it unambiguously recognizable for Fiberklaar.POP Equipment

In order to have distribution points in Fiberklaar’s network, Fiberklaar will have conditioned technical buildings in which Operator can place their equipment. The Housing specifications are based on ETSI standards. The following ETSI standards are applicable to equipment and its environment:

- Mechanical : ETS 300119-4;
- DC Powering : ETS300132-2;
- Environmental : ETSI EN 300 019-1-3;
- Emitted sound power : ETSI EN 300 753.

Further standards and requirements are described in this paragraph.

**Mechanical system**

- Door can be opened remotely or with (temporarily) authorized batch;
- Burglary detection;
- Lights.

**Temperature and cooling**

The POP is compliant with free air cooling of +4 °C (according to ETSI standards). Cooling capacity is depending on POP size (14m<sup>2</sup> = 16kW and 11m<sup>2</sup> = 11 kW).

- Air temperature regulation;
- Temperature measurement, smoke and flooding detection;
- Raised floor;
- Fire protection and fire alarm system, fault detector;
- Fire extinguishers and evacuation system;
- Heating and air treatment / cooling installations.



## **Power**

Every POP is equipped with grounding and lightning protection. The POP is compliant with ETSI specifications.

- **230V AC** and **48V DC** power;
- 230V AC in separate groups of **16Amp**.

## **UPS**

UPS has an autonomy of 2 hours.

## **Operator Racks**

Operator racks facilitate equipment suitable for racks ETSI, 47 HE. Operator Racks are specified in paragraph 0.

### 2.6 Access POP locations

Fiberklaar is responsible for Access Control in the POP locations (WP and LC). Fiberklaar provides 24-hour, 365-day-a-year access to POP Locations to certified Operator technicians for Operator Equipment activation, installation, maintenance and incidents. The required level of certification is adjusted through the operational consultations. Certified Operator technicians will be provided with a key card. Access can be requested through the access process using the access procedures. (See also the Annex 2.4 – Operational Interfaces to Reference offer concerning the use of passive fiberglass networks).

### 2.7 Quality of service

Fiberklaar will provide ODF access in accordance with the agreed service levels in Annex 3 Service Level Agreement (SLA) to Reference offer concerning the use of passive fiberglass networks.

Fiberklaar and Operator will regularly assess the service levels achieved on the basis of the reports provided by Fiberklaar as described in Annex 3 Service Level Agreement (SLA) to Reference offer concerning the use of passive fiberglass networks.

For certain periods of the year, Fiberklaar uses a "freeze" for certain activities. This "freeze" is announced and communicated through the operational consultations. During a "freeze," changes to the network are prohibited, which includes a.o. the addition of new network elements. Activations or deactivations remain possible throughout the freeze.

## **Scarcity scheme**

The space for Operators in Fiberklaar's domain is not unlimited. Fiber and Equipment capacity is being assigned on first come first serve on basis of requests from Operator(s) to Fiberklaar.

Applications for the provision of equipment and fiber space are processed by Fiberklaar in order of receipt of the requests. Based upon the order sequence and availability capacity is assigned or not. Operator may only request the required space in an EQF cabinet for its contracts and/or Subscribers with additional capacity for growth according to future business plans according to forecasts (see Annex 2.2 - Ordering and Delivery (O&D) Reference offer concerning the use of passive fiberglass networks).

## **Improper use**

Operator may only use the part assigned by Fiberklaar. If other or more space has been used Fiberklaar will inform Operator. Operator will have a reasonable period of time to make the necessary adjustments. If this is not done or does not happen in time, Fiberklaar can empty the improperly occupied capacity.

### Settlement arrangement

Fiberklaar will consult with Operator in good faith if there is no more capacity available in a POP location or LC WP Fiber. Fiberklaar and Operator will together discuss if, by making more efficient use of the space, capacity can be created. The reference for Fiberklaar for asking is that there is a significant discrepancy between the market share in the specific area and the occupation rate. For example, the Operator occupies 40% of the POP rack space while only having 10% of market share.

Fiberklaar will submit a settlement request to the Operator. A period of no later than 2 weeks will be used for inventory and planning of the settlement, and a period of 3 months will be used for the execution of the settlement unless agreed otherwise in consultation with Operator(s).

### 3. Co location LC

#### 3.1 Co Location

The colocation LC subservice consists of multiple elements:

- Connection from the Operator backhaul to the LC via GCO provided by Fiberklaar;
- Capacity in EQF for active equipment of Operator;
- Connection to Area Network in LC POP Location.

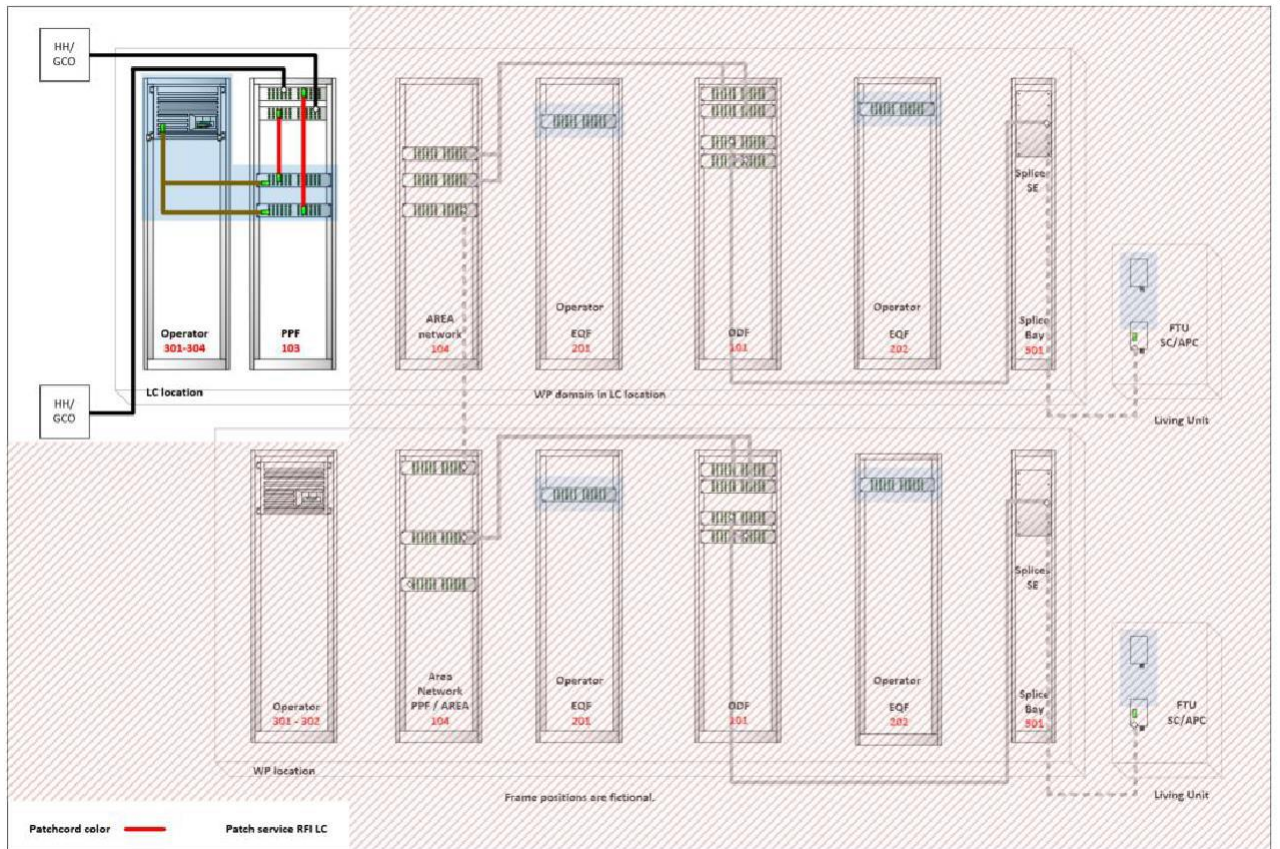


Figure 4 Schematic overview LC Domain

All patches in LC location (with exception of direct Operator patches) are provided and placed by Fiberklaar (see annex 2.2). So Fiberklaar is responsible for patching ODF backbone to OLT and patching ODF (PPF) to ODF LC WP Fiber.

Fiberklaar is also responsible for the provisioning of the LC location and the provisioning of this conditioned space in order to be able to deliver the Co location LC service.

Operator is responsible for installing OLT in LC and installing breakout cable between OLT and ODF (PPF).

### 3.2 LC POP details

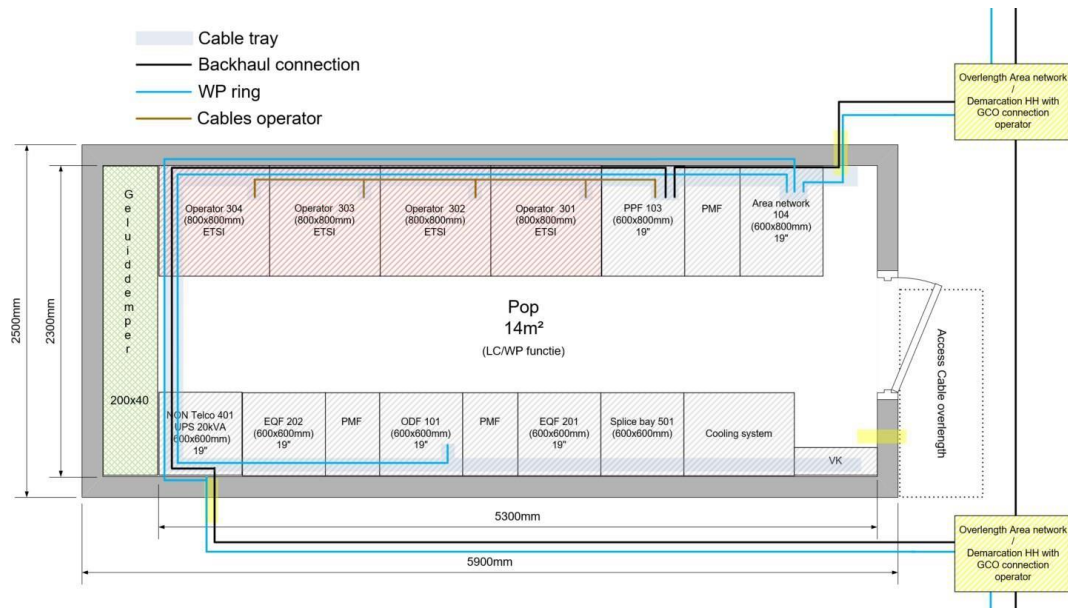


Figure 5 Plan of 14m² LC POP

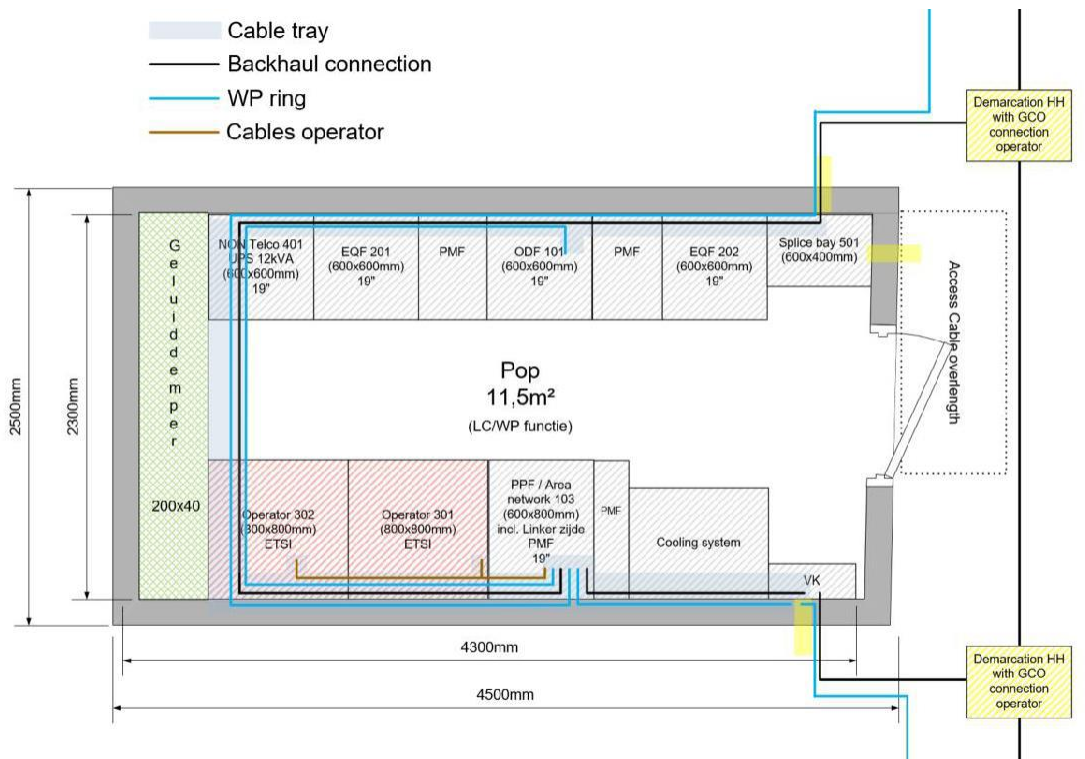


Figure 6 Plan of 11,5m<sup>2</sup> LC POP

The specification of the hardware is specified in Annex 2.1 - Technical Description to Reference offer concerning the use of passive fiberglass networks

#### 4. LC WP fiber service

The purpose of the LC WP fiber service is specifically and exclusively for unlocking the WP for ODF access. These fibers, which go from the WP (usually) redundant to the LC, are connected on separate ODFs. By default, n fibers are finished clockwise and n fibers counterclockwise per WP.

In some cases, when a WP is very small or placed on a long distance from the LC, it can be decided to connect the WP with a single connection instead of a redundant connection. This could be the case for trenching routes with less than e.g. 5000 Homes Passed.

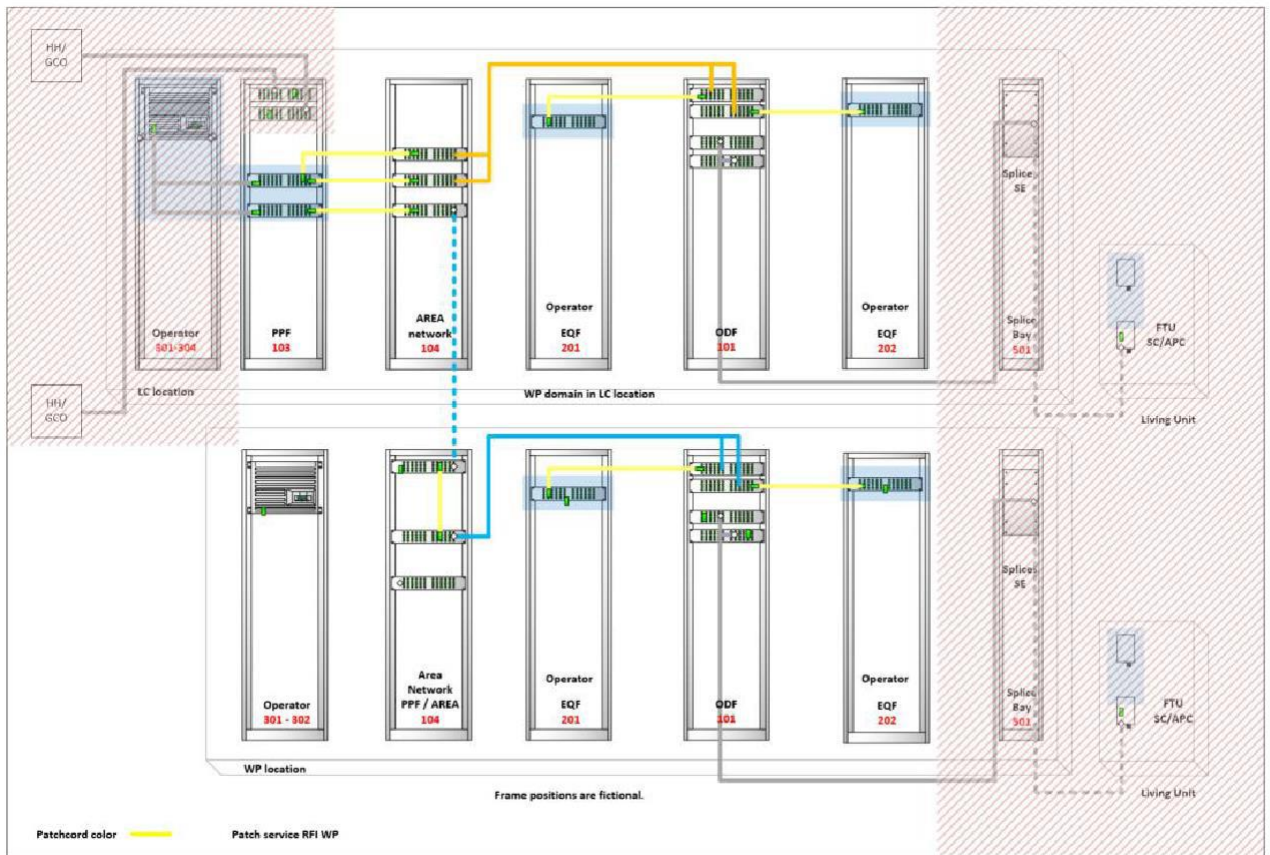


Figure 7 Schematic overview LC WP Fiber

Both the network design and the processes of Fiberklaar are based on the accessibility by Operator via the LC and LC WP fiber. Operator is responsible for its network design and in doing so, properly complying with sufficient redundancy measures. Fiberklaar will assign ODF ports for the LC WP fiber service from the WP to the LC.

Operator is responsible for applying for LC WP fiber service capacity through the appropriate interface.

In order to provide the LC WP Fiber service Fiberklaar provides the network from WP to LC.

If there is no capacity expansion possible in the LC WP fiber service, Fiberklaar will appeal to Operator(s) in accordance with the scarcity scheme in Chapter 0. Settlement Process is described in chapter 0.

### LC WP Fiber capacity

The fiber capacity in the LC WP fiber for a specific LC-WP relation is sufficient based on the type of WP. The LC WP fiber always takes into account the initial need, but also certain *growth/extra capacity*.

Homes passed per PoP	Fibers per PoP	Minimal reserve*
0 – 400	24	48
401 – 600	36	48
601 – 800	48	48
801 – 1.600	96	48
1.601 – 2.000	96	48
2.001 – 2.400	108	48
2.401 – 2.800	120	48
2.401 – 3.200	132	48

\*The minimal reserve only applies to the total cord of WP's routed by the same trench from the LC in initial Roll-out. These fibers are not interrupted in a POP (so not per POP), so are end to end capacity. The reserve capacity will be used for maximal in and expansions.

## 5. Co location WP

### 5.1 Co location

The co location WP subservice consists of multiple elements:

- Connection from the LC WP Fiber ODF to the EQF;
- Capacity in EQF for active equipment of Operator;
- Connection to Access ODF.

All patches in LC location (with exception of direct Operator patches) are provided and placed by Fiberklaar (see annex 2.2). Therefore Fiberklaar patches ODF LC WP Fiber to EQF and EQF to access ODF and installs cable bundle/patch between access ODF and EQF.

Fiberklaar is responsible for the provisioning of the WP location and the provisioning of this conditioned space in order to be able to deliver the Co location WP service. Operator is responsible for installing equipment in WP-section.

#### **Domain separation in a POP**

The figure below shows an example of the domain separation of a WP/LC .

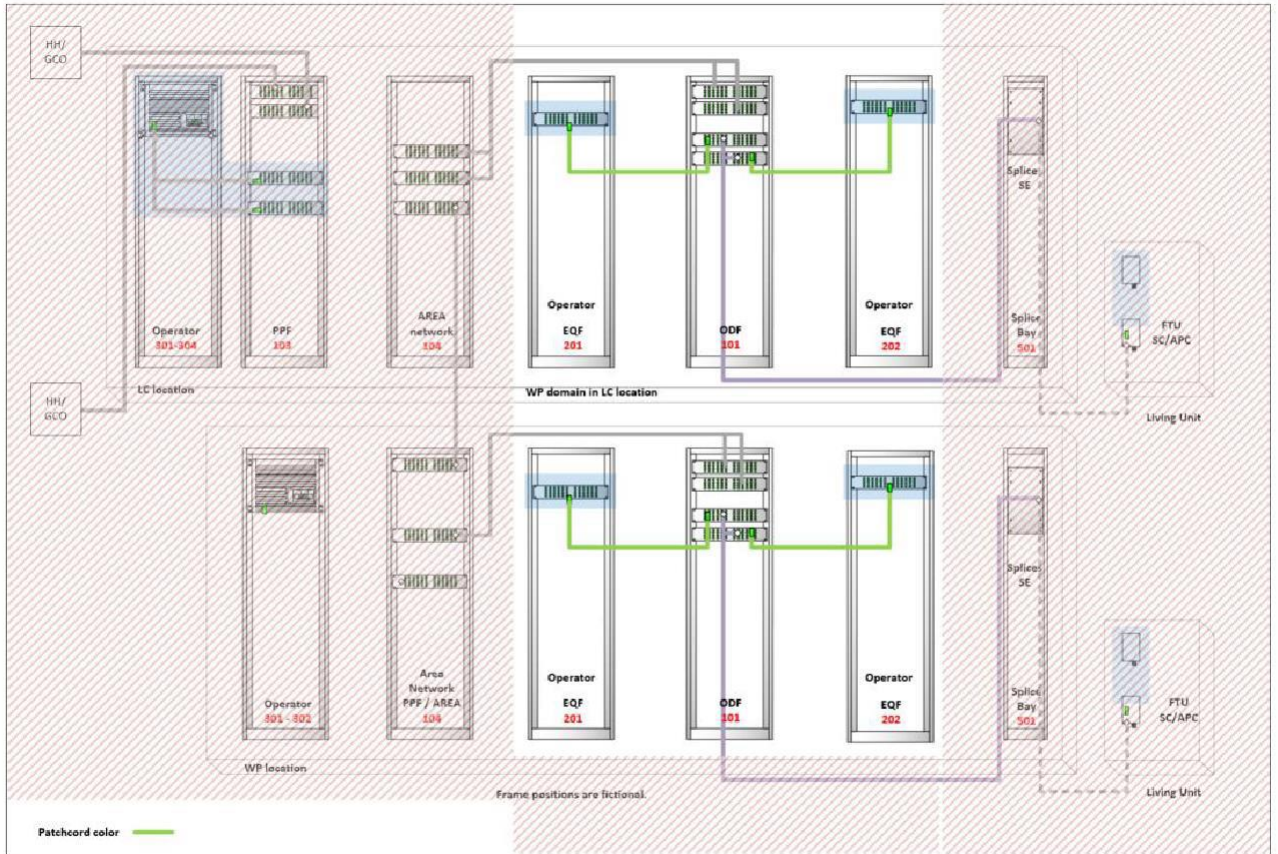


Figure 8 Schematic overview WP Domain

## 5.2 WP POP details

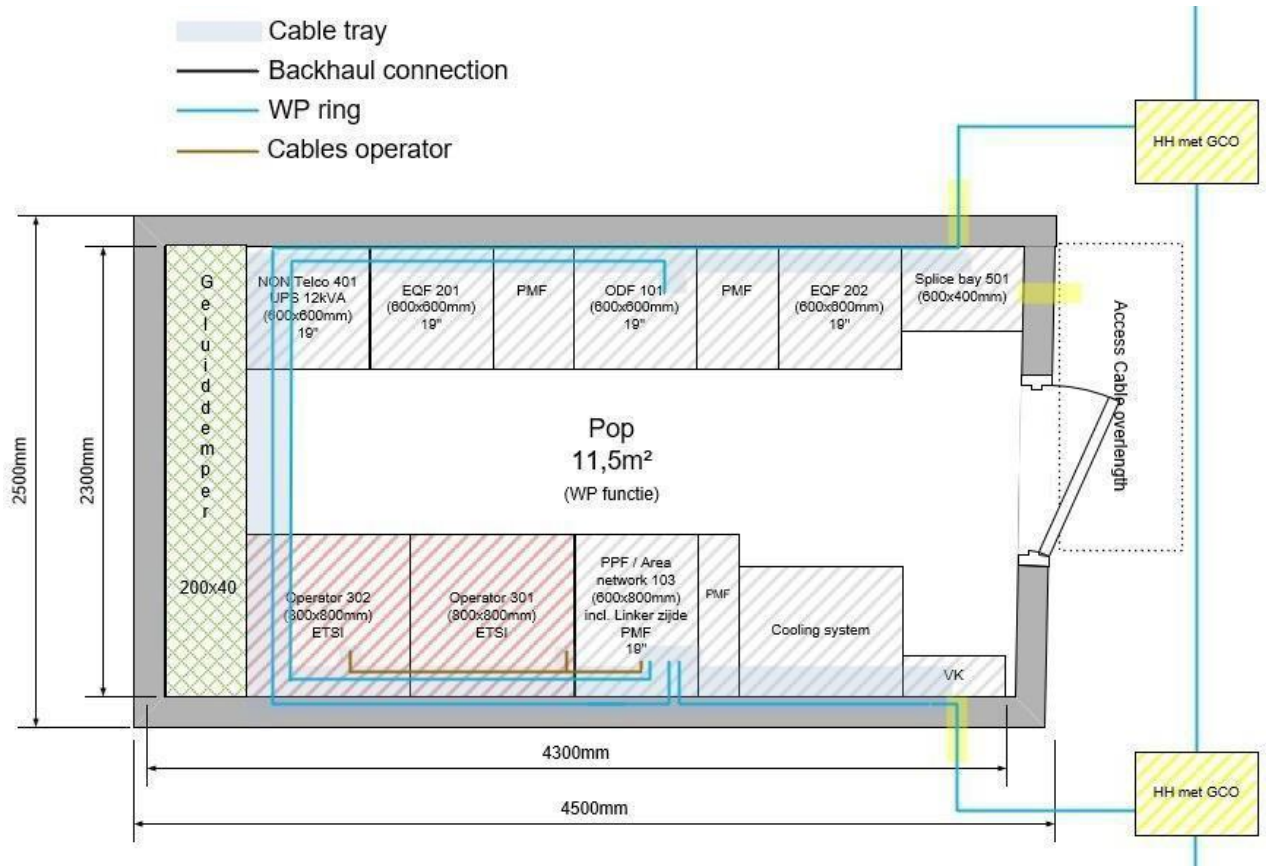


Figure 9 Plan of 11,5m<sup>2</sup> WP POP

A WP POP location can also be combined with a LC POP location. These details are in chapter 3 Co location LC. The specification of the hardware is specified in Annex 2.1 - Technical Description to Reference offer concerning the use of passive fiberglass networks



## 6. Fiber Access Service

### 6.1 End-user location and connection

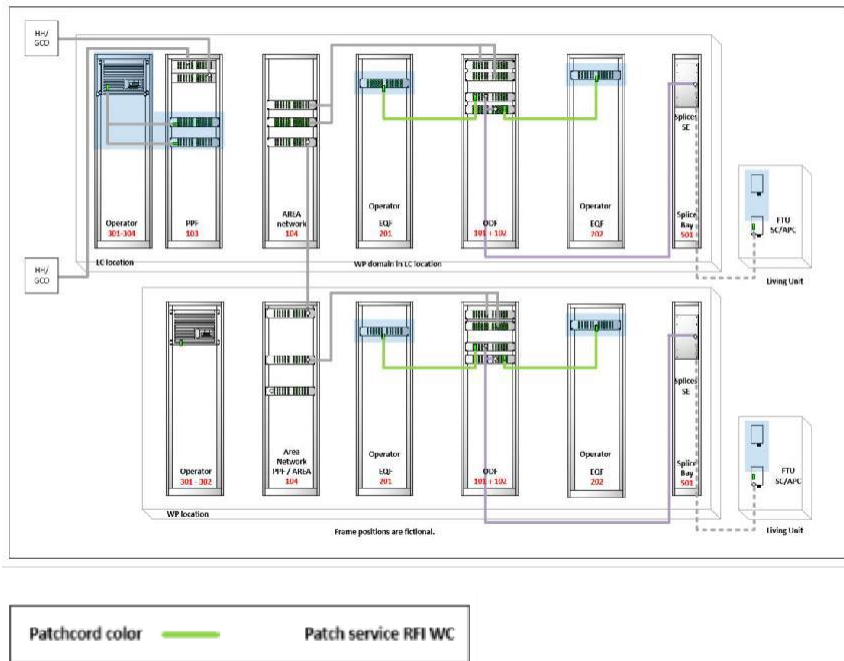


Figure 10 Schematic overview Fiber Access

All Subscriber locations in a Deployment Area will be assigned a connection. Fiberklaar's infrastructure has some spare capacity for any expansions following the initial roll-out of the area. Whether a Subscriber is actually connected depends on the following factors:

- Whether the Subscriber location falls within the Connection Area;
- The selected roll-out protocol (connect all Subscriber locations or only Subscriber locations with an agreement with Operator, Service Provider or Subscriber direct);
- Grants the owner/occupant of the Subscriber location access for the realization of the connection;
- Identified commercial or technical obstacles.

#### Fibers per connection

A connection consists of one fiber.

#### Connection at the WP on the ODF frame

In the ODF part, there are three types of finished connections:

- Connections with an existing FTU;
- Connections where the "huisaansluiting" HAS still has to be made;
- Spare fibers.

These finished fiber connections have a LC/APC connector.

## Connection at the Subscriber location on the FTU

In each Subscriber location, the fiber of the connection is terminated in a so-called Fiber Termination Unit (FTU). In the FTU, Fiberklaar has standardized SC/APC connectors (8 degrees) (IEC-61754-4). It shows that the connection is finished. The type of FTU is determined by Fiberklaar and is specified in Appendix 3.1.

If the connection cannot be finished at the Subscriber location, it will be placed on the property boundary, or at the façade (Home Passed). This allows the connection to be completed later, via a Post-connection order at the Subscriber location, see the Annex 2.4 – Operational Interfaces to Reference offer concerning the use of passive fiberglass networks and the Annex 2.2 - Ordering and Delivery (O&D) Reference offer concerning the use of passive fiberglass networks.

Operator is responsible for submitting construction orders via the specified Ordering & Delivery interface (see Annex 2.4 – Operational Interfaces to Reference offer concerning the use of passive fiberglass networks) and installing ONT at customer location. Fiberklaar is responsible to deliver the fiber access service from Subscriber location to ODF in the area. Fiberklaar is also responsible of the contact/organization with building owner for this delivery. During this process Fiberklaar will provide Operator with proper status information whether a location is Ready for service or other status information.

### 6.2 Fiber patching

All patches in POP locations (with exception of direct Operator patches) are provided and placed by Company.

The following specifications are being used for the network fiber patches.

Specification	Cable
Type of Fiber	G.657A1 or G.657A2
Attenuation	≤0.12 dB mean ≤0.25 dB max. for >97% of samples (Grade B)
Return Loss Grade	≥45 dB
Maximal length	4,5 m
Maximum diameter	1,6 mm

Connections in POP's are made by patches or splices. Numbers of patches and splices are strived to keep as minimal as possible.

In POP locations Fiberklaar has standardized LC/APC (8 degrees) connectors (IEC-20).

Grade B connections are used in network of Fiberklaar.

Fiberklaar is responsible for the realization of a Patch connection between ODF and Fiberklaar Equipment, the so-called fiber patching service, in accordance with the Annex 2.4 – Operational Interfaces to Reference offer concerning the use of passive fiberglass networks and Annex 2.2 - Ordering and Delivery (O&D) Reference offer concerning the use of passive fiberglass networks .

## Annex 2.1 - Technical Description to Reference offer concerning the use of passive fiberglass networks

**Annex 2.1 – Technical Description**

**to**

**Reference offer concerning the use of  
passive fiberglass networks  
version 1.0**

**("ODF ACCESS")**

## Table of Content Annex 2.1

1	Introduction .....	63
1.1	General	63
1.2	Amendments	63
2	POP location specifications and rules.....	64
2.1	Connecting to the LC	64
2.2	Hardware in POP Location Specification	64
2.2.1	14m <sup>2</sup> POP Location.....	65
2.2.2	11,5m <sup>2</sup> POP Location.....	66
2.3	Subrack port numbering	68
2.4	Patch numbering	69
2.5	House rules POP locations	69
3	Fiber Access Specifications.....	69
3.1	FTU	69

## 1. Introduction

### **General**

This document describes the technical details of Fiberklaar's FTTx network and the regulation of Fiberklaar which Operator should comply with. This document is the Annex Technical Description belonging to the ODF reference offer.

This service description describes the delivery of ODF access by Fiberklaar through its ODF territories. the services offered are wholesale services.

In this documentation based upon the building blocks of the ODF Service the regulations will be described. The distinguished building blocks of the ODF service are the following:

- Chapter 2 describes the POP locations (LC and WP) specifications and rules;
- Chapter 3 describes the Fiber access specifications and rules.

For LC WP Fiber there are no further specifications and rules for the Operator other than the Service Description.

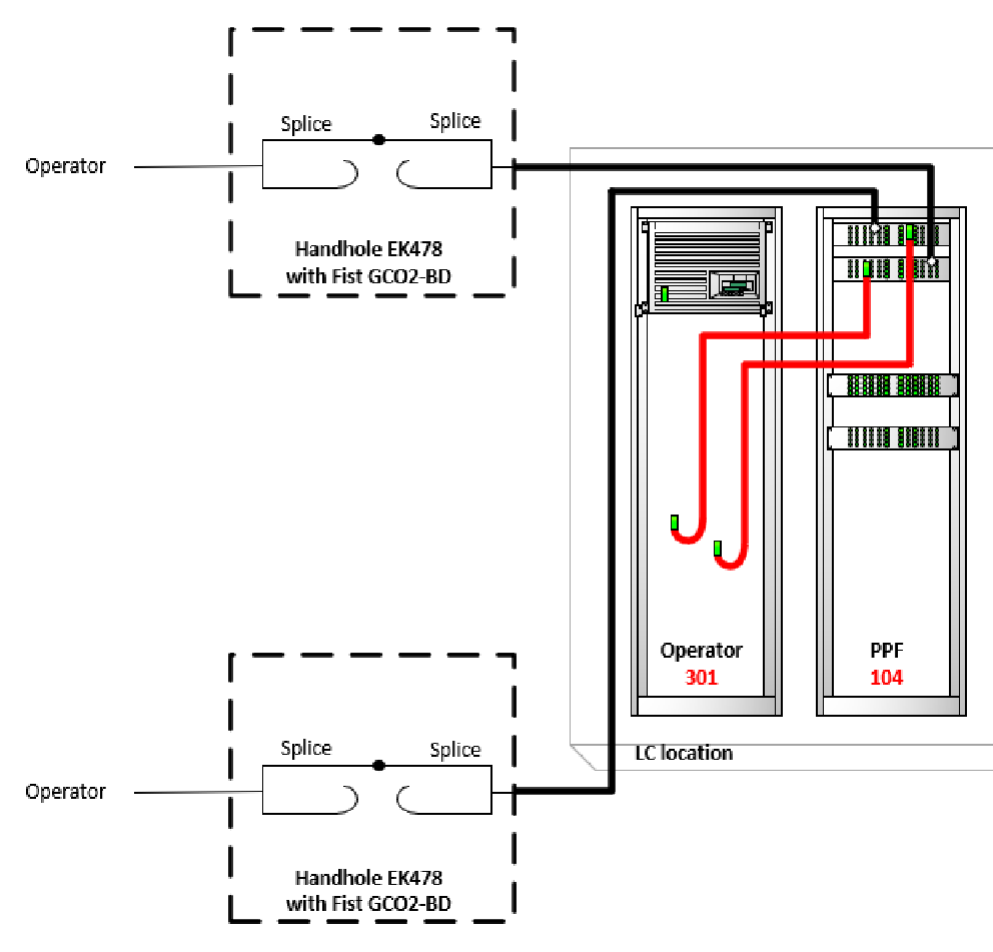
### **Amendments**

If as a result of (announced in accordance with Belgian Law) service introductions, adjustments to the service or process adjustments, this Annex is no longer fully or partially up-to-date, any necessary adjustments to this Annex shall be incorporated into a new version thereof, which automatically replaces the old Annex. In any case, any modification shall be done in consultation between Operator and Fiberklaar and shall be subject to prior approval by BIPT.

## 2. POP location specifications and rules

### 2.1 Connecting to the LC

Fiberklaar owns and is responsible for the handhole where Operator(s) can connect its network to Fiberklaar's network. Fiberklaar and Operator will discuss on how to connect to Fiberklaar's network. Operator will provide correct to be spliced fiber information. Fiberklaar will plan connection to the network. Operator is responsible for introducing fiber (with 20-30 meters overlength) to the handhole before Fiberklaar connects the network. Operator is not allowed to introduce fiber into splice box. Splicing will be done by Fiberklaar.



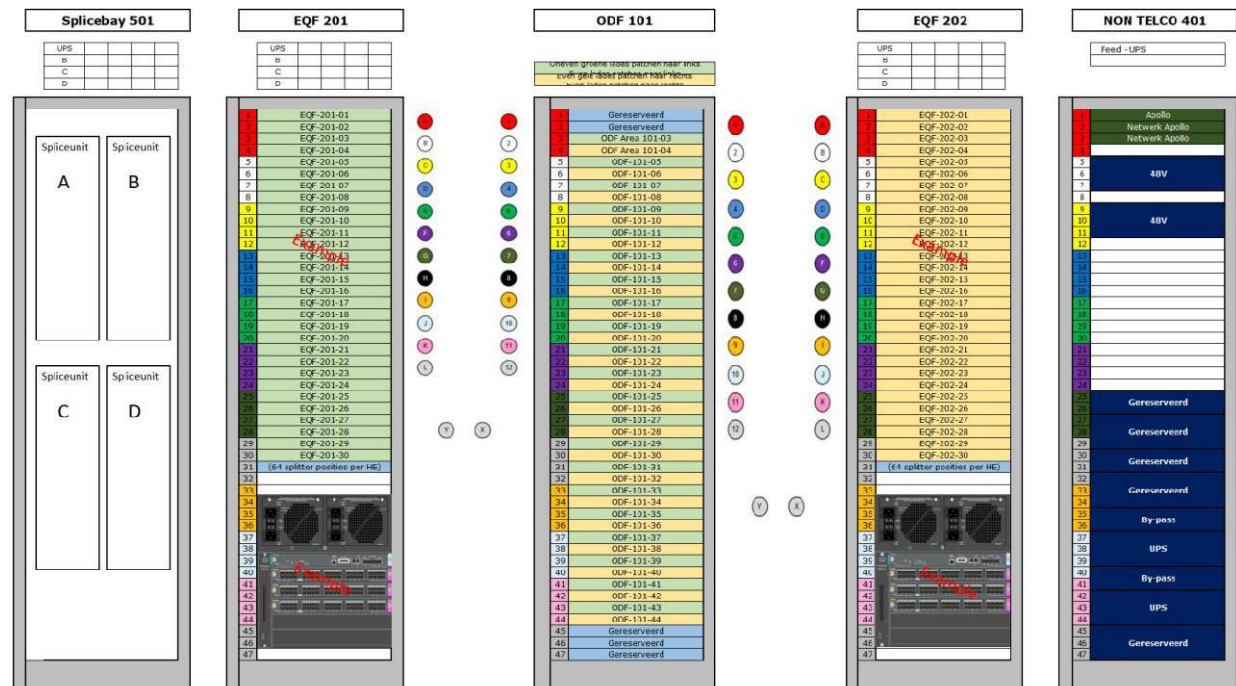
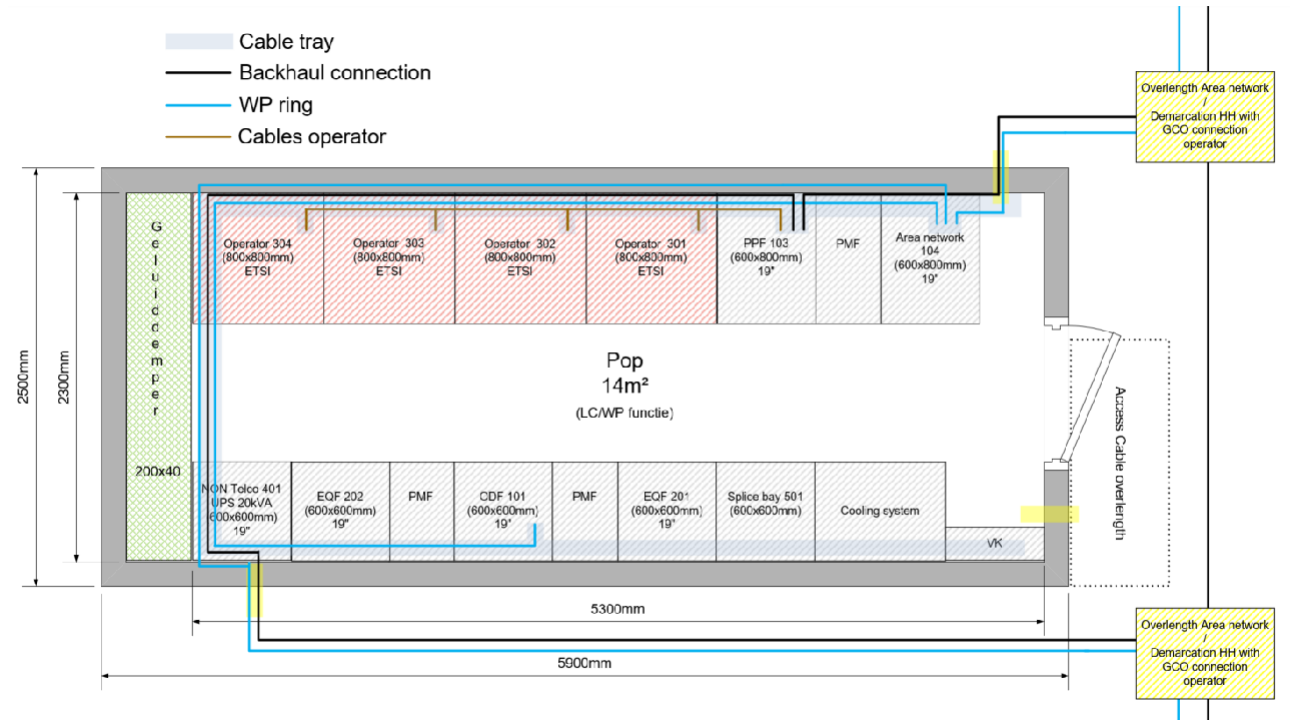
### 2.2 Hardware in POP Location Specification

Within the POP Location cabinets are being provided by Fiberklaar. Depending the size of the POP location map of cabinets might differ. Process to order rack space capacity within the cabinets of Fiberklaar is being described in Annex 2.2 - Ordering and Delivery (O&D) Reference offer concerning the use of passive fiberglass networks.

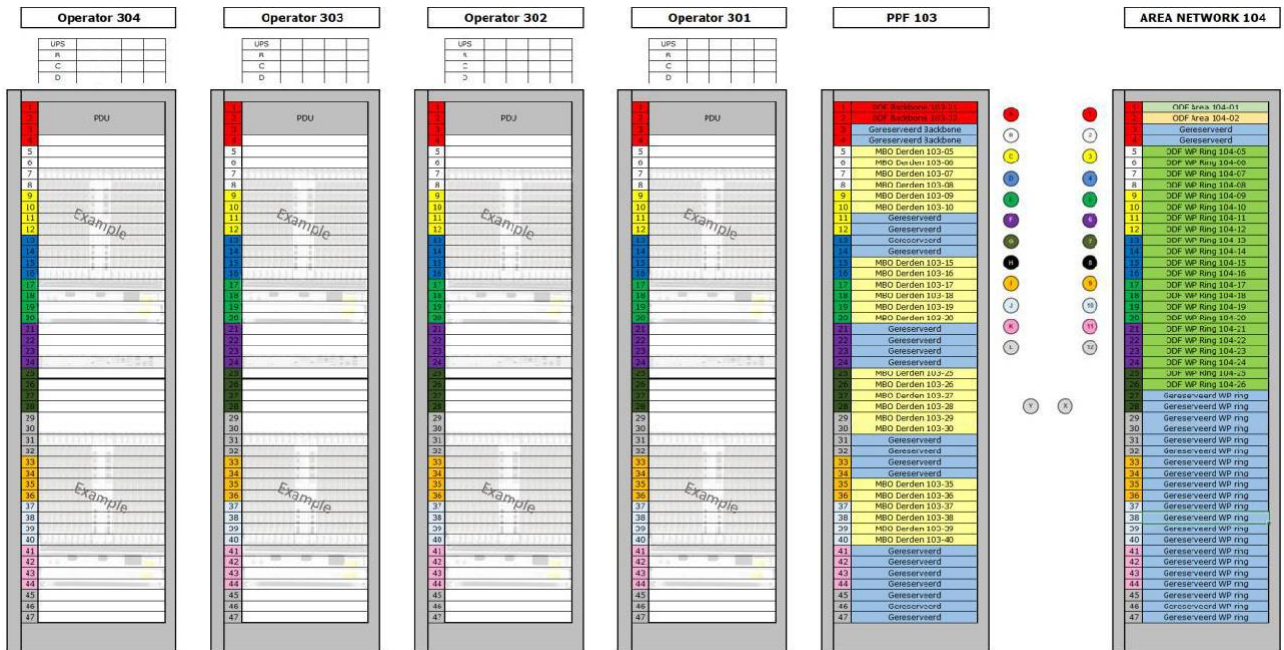
During construction it is possible to preinstall equipment based upon standard configuration by Operator. This preinstallation is not allowed to lead to delay of delivery of the POP location to the construction site. Prerequisite for preinstallation of equipment by Operator is that Operator will roll out in all POP Locations of Fiberklaar.

Patches between Fiberklaar and Operator will be provided by Fiberklaar. Operator is responsible for connecting patch to Active Equipment. The overview of which Patches are used can be found in Annex 2 - Service Description to Reference offer concerning the use of passive fiberglass networks.

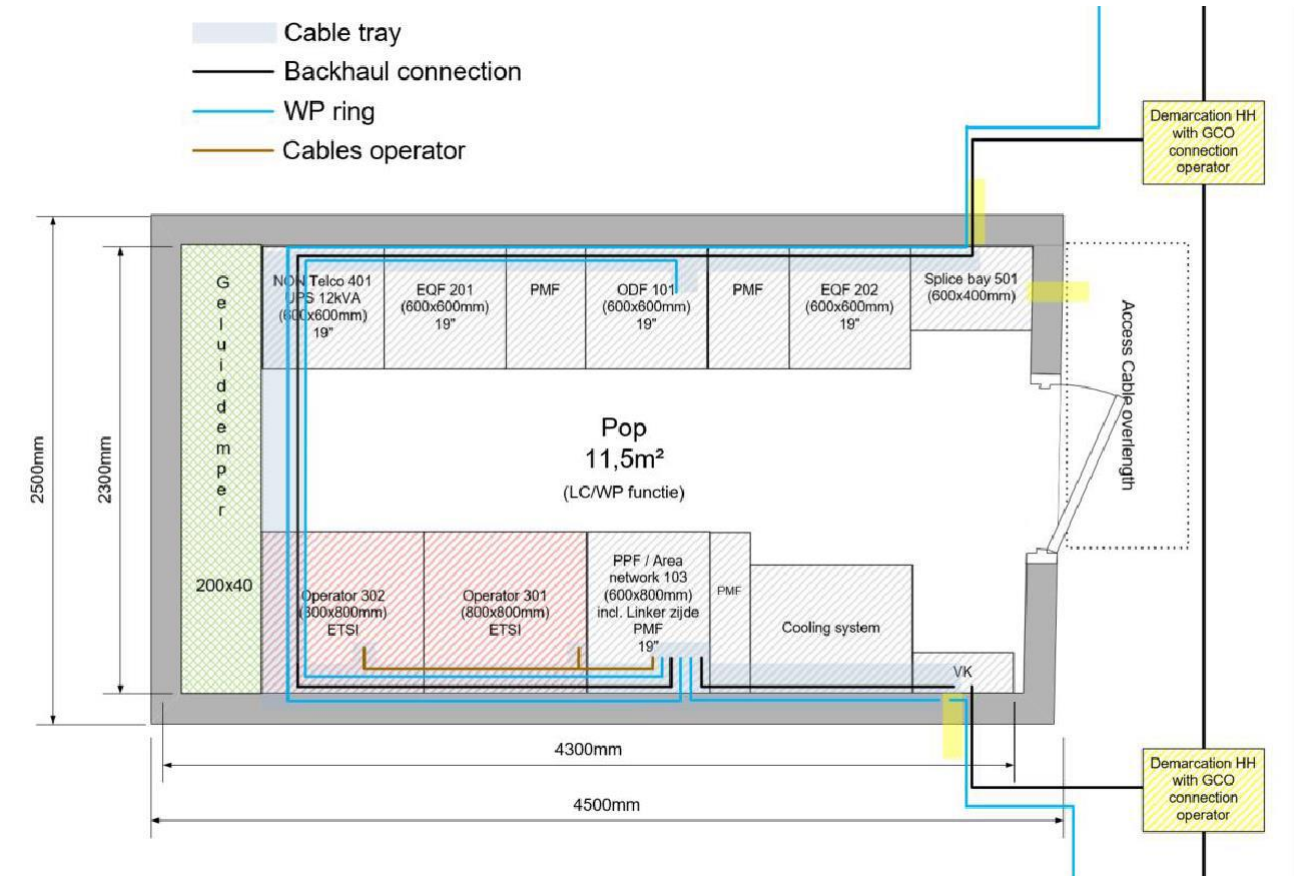
14m<sup>2</sup> POP Location





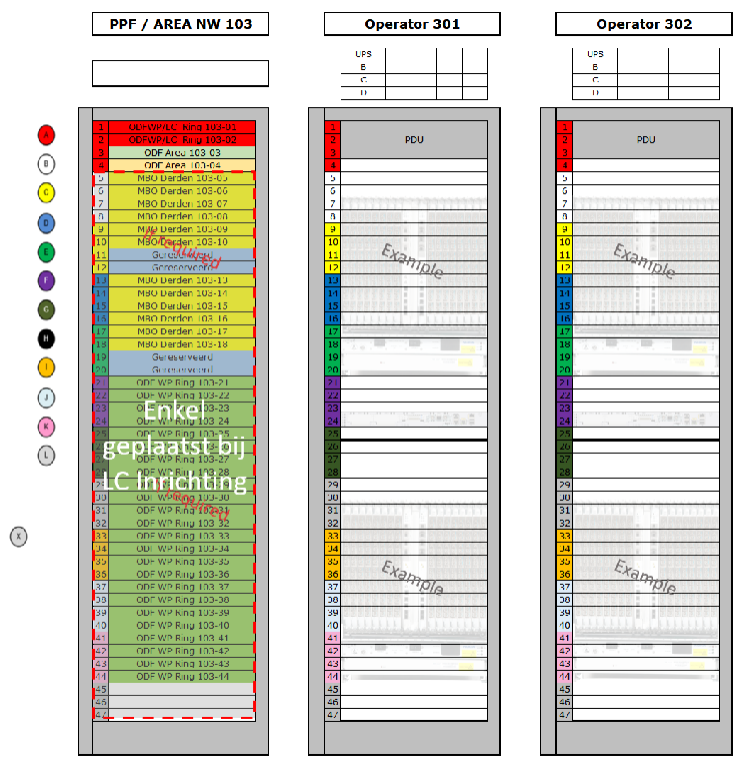


11,5m<sup>2</sup> POP Location



Map of LC/WP function





### 2.3 Subrack port numbering

Port numbering principles on front panel subrack are as follows:

1. "As reading a book" :
  - Numbering from left to right on each row;
  - Starting from the top row to the lower row.
2. Numbers only, unique and maximum 2 digits

IHE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72
	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96

This applies to all Fiberklaar's patch panels.

In case of using splitters by Operator in racks EQF-201 and EQF-202, then these must contain at least 64 LC/APC 8° ports per HE to provide access patches.

To supply connections between Operator cabinets and the area network cabinet, the operator can use the assigned space in cabinet 103. Per Operator cabinet (300 series ranging from 301 to 304) there is 6HE reserved in cabinet 103. Direct patches between Operator cabinets (300 series ranging from 301 to 304) and Area Network cabinet (103 partly and 104) are not allowed.

Operator will propose a design of application of splitters and patch panels in cabinets. Fiberklaar will approve design before installation. In case of scarcity of capacity see Annex 2 - Service Description to Reference offer concerning the use of passive fiberglass networks .

## 2.4 Patch numbering

After installation, the Patch cable must be labeled on both sides.

The following applies to these labels:

- Both outer jacket ends must be provided with the same unique label;
- Imprint: LIJNBENAMING (e.g. UTAC in case of Access patch);
- LIJNBENAMING is being defined by Fiberklaar on basis of order, all Access patches have UTAC assigned and are labeled at Access patch with UTAC and align with labeling of FTU;
- The label must be placed around the cable and may not be a so-called flag, but must be a so-called self-laminating label. Place the label on a straight section of the cable;
- The label must be legible and remain in place for the life of the network (minimal 25 years).

Patches used by Fiberklaar (including colors of used Patches) are described in Annex 2 - Service Description to Reference offer concerning the use of passive fiberglass networks.

## 2.5 House rules POP locations

The following rules apply in all POP locations:

- With planned access, the access is requested by e-mail 24 hours in advance and outside office hours 3 working days in advance;
- In the event of unplanned access, usually as a result of an incident, this needs to be requested by telephone and confirmed in an email. In all cases, the visit is reported on arrival, after which the access pass is unblocked. When leaving the POP, the visit will be ended and, where necessary, the badge blocked again;
- Use the personal badge to access the POP;
- Access doors must be closed immediately when entering and exiting the room;
- Eating, drinking and smoking is not allowed in the technical POP area;
- It is not allowed to bring food and drinks into the technical POP location;
- When working on active equipment, be ESD clean;
- The area must be clean at all times and must be left clean after the work. It is not allowed to leave waste and / or packaging material in the room or to store equipment;
- When entering and leaving the technical POP location you must:
  - If you find irregularities, report this immediately;
  - If you find alarms, report this immediately;
  - If you find waste or dirt, report this immediately;
- Not let anyone in;
- Work professionally;
- Do not switch any equipment on or off or change any settings without permission;
- When leaving the technical (POP) location, the lighting must be switched off at all times;
- Check that the door is properly closed.

## 3. Fiber Access Specifications

### FTU

The FTU will be placed near existing telecommunications network entrances in the living unit. The connector on the FTU is an SC/APC connector.



## Annex 2.2 - Ordering and Delivery (O&D) Reference offer concerning the use of passive fiberglass networks

**Annex 2.2 – Ordering and Delivery (O&D)**

**to**

**Reference offer concerning the use of  
passive fiberglass networks  
version 1.0**

**("ODF ACCESS")**

## Table of Content Annex 2.2

1	Introduction	72	
1.1	General	72	
1.2	Amendments	72	
2	Ordering	72	
2.1	General	72	
2.2	Access Orders	73	
2.3	(De-) Activation orders	73	
2.4	Capacity orders	74	
2.5	Improved Service orders	74	
2.6	Starting points	74	
2.7	Start/stop occupation period		<b>Error! Bookmark not defined.</b>
3	Access orders	75	
3.1	Initial roll-out	75	
3.2	Post Connection order	76	
3.3	FTU Move or removal	76	
4	(De)-activation	76	
4.1	Patch order	77	
4.2	De-patch order	77	
4.3	Portability	78	
4.4	Cancellation of a Patch, Emergency Patch, De Patch order or migration order	78	
5	Network capacity orders	79	
5.1	Co location order	79	
5.2	LC WP fiber order	79	
6	Improved Service orders	80	
7	Forecasting	80	
7.1	Underrun	80	
7.2	Overrun	80	



## 1. Introduction

This Annex contains the Ordering and Delivery (O&D) relating to ODF access to Fiberklaar's Connection Network(s).

### 1.1 General

Ordering and Delivery interfaces are described in the Annex Operational Interfaces.

### 1.2 Amendments

If as a result of (announced in accordance with Belgian Law) service introductions, adjustments to the service or process adjustments, this Annex is no longer fully or partially up-to-date, any necessary adjustments to this Annex shall be incorporated into a new version thereof, which automatically replaces the old Annex. In any case, any modification shall be done in consultation between Operator and Fiberklaar and shall be subject to prior approval by BIPT.

## 2. Ordering

### 2.1 General

Operator rents the Services (see Annex 2 - Service Description to Reference offer concerning the use of passive fiberglass networks) by placing orders.

There are several order types, and per order type, there are one or more order scenarios. Per order scenario, a Service Level Agreement (SLA) applies. The order types with the corresponding order scenarios are described here.

The following order types are distinguished:

Access orders:

- Connection order
- FTU move or remove
- Post-construction order /feasibility study order (FSO order)

Claims:

- Claim connection
- Unclaim connection

(De-) Activation orders:

- Patch order
- Emergency Patch order
- De-patch order
- Portability order

Capacity orders:

- Co location order
- LCWP fiber order

Improved Service Level (ISLA) orders:

- Add ISLA order

- Remove ISLA order

To determine the status of connection so the right order type can be submitted the service availability checker (AC) is available. The AC contains all available and planned network connections, including their technical details (area id, WP/LC name, UTAC, etc.). AC's goal is to consistently and transparently provide all connections data using API's, file exports and UI's.

By connecting to the AC, Active Operators and ISP's get access to information needed for selling subscriptions to Subscribers and submitting the right orders.

### 3. Access Orders

An access order involves the installation, relocation or removal of a FTU. Two phases are being distinguished, "roll out phase" where focus is on rolling out as many connections as possible within the scope of the project, and "post construction phase", where addresses will be rolled out on basis of single orders.

#### Roll out phase

During roll out phase Fiberklaar plans to roll out a complete area. During roll out it, Operator cannot order individual addresses. However, it is possible for Operator to reserve connections through the Claims process. Once the connection is physically delivered (FTU is available), it will be marked "Homes Connected" (HC) in the Availability Checker (AC) and the Operator can place an "Activation Order" against it.

The following Claims processes are distinguished

- Claiming of the fiber connection;
- Unclaiming of the fiber connection.

#### Post-construction phase

As soon as the roll out phase for a particular area is completed, Operator can place Access orders against individual addresses marked as "Homes Passes" (HP) in the Availability Checker (AC). Fiberklaar will carry out the fiber connection .Distinction is being made between connection orders which require underground and which above ground work. Once the connection is physically delivered (FTU is available), it will be marked "Homes Connected" (HC) in the Availability Checker (AC) and the Operator can place an "Activation Order" against it.

Once the FTU is available at Customer premises, it is possible to have the FTU removed (e.g. in case of demolition) or relocated (e.g. in case of rebuilding).

### 4. (De-) Activation orders

In order to activate a fiber connection (FTU is already present in the Premise), Fiberklaar must make a connection from the ODF to the Operator Equipment or to a splitter. Patch cords are used for this purpose.

The following (de)-activation orders are distinguished:

- Patching of the fiber connection;
- Emergency Patch of the fiber connection;
- De-patching of the fiber connection;
- Portability of the fiber connection.

## 5. Capacity orders

Before Operator can provide services over the network of Fiberklaar, active equipment needs to be placed in POP locations of Fiberklaar. In order to build the required connections between Operator equipment Operator can request Co location and LC WP fiber capacity.

- Co location order;
- LC WP fiber order.

## 6. Improved Service orders

On all connections a standard SLA for repair and maintenance is applicable. For certain connections or Subscribers it is possible to change the individual SLA properties of the connection. Available service levels on top of basic SLA are Enhanced or Premium SLA. These improved SLA items have separate service levels as specified in Annex 3 Service Level Agreement (SLA) to Reference offer concerning the use of passive fiberglass networks.

Following orders are available:

- Enhanced ISLA order;
- Premium ISLA order.

## 7. Starting points

For order types and order scenarios, the following applies:

- An order is handled according to an order scenario;
- An order scenario has an SLA as described in Annex 3 Service Level Agreement (SLA) to Reference offer concerning the use of passive fiberglass networks;
- The Premise falls within the Deployment Area;
- The owner/occupant of the Premise grants access for the realization of the Connection;
- There are no technical or financial obstacles to roll out the connection.

## 7. Access orders

### Initial roll-out

Fiberklaar distinguishes two roll-out scenarios:

1. Connect all addresses with customer order
2. Connect all addresses in roll-out area

In both scenarios, all addresses that Operator requires to be connected and are both technically and commercially feasible, will be built.

During roll out it, Operator cannot order individual addresses. However, it is possible for Operator to reserve connections through the Claims process. Once the connection is physically delivered (FTU is available), it will be marked "Homes Connected" (HC) in the Availability Checker (AC) and the Operator can place an "Activation Order" against it.

#### Claims

Claims should be done via the ISP or Operator. A claim consists of contact information of the associated connection. This information will be provided to the constructor to facilitate connecting the connection to Fiberklaar's network.

The following claim types are possible:

- Claim: a connection is not claimed yet and an Operator or ISP wants to claim the connection;
- Unclaim: a connection is claimed, but Operator or ISP will not order the actual patch (e.g. customer has moved, or has decided to go to another ISP or Operator).

If claim contact information needs to be changed the ISP or Operator which has initially claimed the connection can send in a claim with updated contact information.

#### Process

Operator or ISP claims a connection that is planned for roll out (where the FTU is not delivered yet).

By the daily update Fiberklaar updates Operator of status of connection, and Operator can check status via AC. Fiberklaar will report the HP and HC connections as finished when ready. This will lead to a HC ready in the Availability Checker. Starting from that phase Operator can order the patch.

#### Miscellaneous

Operator can only order patches if ISP is connected to Operator.

Claimed addresses/connections are only available to be ordered by other ISP if other ISP can hand over a letter of authorization. The letter of authorization is a paper or electronic document by which the Subscriber authorizes the Service Provider to take all necessary steps to carry out his order, including the power of attorney to, where applicable, cancel the contract(s) (including claims) with the donor or initially claimed Service Provider.

In any other case connections are available for other Operator/ISPs once the connection is unclaimed. Claims will be managed by Operator or ISP, they will **not** be automatically deleted.

Once Operator or ISP finds out connection will not be ordered, Operator is obligated to unclaim the connection.

Fiberklaar will check whether all claimed connections are ordered. Fiberklaar has the right to delete all open claims, where no patch order has been submitted. All open claims will be deleted within a period of 3 months after the connection has been physically delivered (FTU installed) in the Operations phase. Fiberklaar will inform the Operator or ISP of its intention to delete the open claim 1 month prior to the expiration of the 3 month period mentioned hereabove. If Operator proves that the absence of a timely patch order is not due to its fault, the parties will discuss in good faith an extension of the 3 month period mentioned hereabove. If Operator or ISP regularly fails to convert claims into active connections, Fiberklaar reserves the right to perform checks on claimed connections in other phases and to actively remove claims.

### Post Construction order

Fiberklaar distinguishes addresses for which an order is accepted directly (HP address) and any other addresses.

Scenario: Prepared Post Construction (HP address)

This scenario concerns addresses where the infrastructure is in place except for the last drop.

Distinction in lead times is being made between connection introduction with above ground (e.g. façade) network and with underground network (including private land).

The order is accepted and the connection will be made. The status of this address in the availability checker will be updated to “connected” (HC).

In an initial stage, Fiberklaar (or its contractor) will make the appointment with the end customer for fiber intro works. Conditional on the availability of sufficient resources, Fiberklaar expects to implement an appointment booking functionality by early 2023. This timeframe does not contain a commitment from Fiberklaar. The technical specifications as well as SLA's of this new service will be detailed out at a later stage.

Scenario: Other addresses – Feasibility Study

Addresses not listed in availability checker (AC) as Homes Connected (HC) or Homes Past (HP) need to be evaluated on a case by case basis subject to technical and commercial feasibility outside this reference offer.

### FTU Move or removal

A request from a Subscriber addressed to Operator for the move of the FTU within a premise or the removal of the FTU (for example because of demolishing of premises) can be forwarded to Fiberklaar. Fiberklaar will handle this request directly with the Subscriber.

Removal is done when ODF is not active and free of charge.

The move of a FTU involves cost that will be charged to the Subscriber or Operator. End user or Operator will receive an offer from Fiberklaar. The move will only be carried out after payment of the quote by the Subscriber or approval of Operator.

## 8. (De)-activation

In order to activate a fiber connection, Fiberklaar must make a connection from the ODF to the Operator Equipment or to a splitter. Patch cords are used for this purpose.

Under the fiber patching service, the following versions are distinguished:

- Patch order to connect the fiber

- Emergency patch order to connect the fiber
- De-patch order to disconnect the fiber
- Migration order to change operator of the connection fiber

In the order to Fiberklaar, Operator indicates which ODF ports it requires to be patched. If these ports are already occupied, Fiberklaar will reject the order, unless Operator uses the Portability (0) service, which will be according to Belgian law.

### Patch order

Operator uses a patch order to patch a specific ODF fiber of a connection at a particular address at an active position indicated in the order.

Scenario: Patch order

The patch order is accepted.

The patch will be delivered within the standard delivery time as defined in the SLA. When the patch cable has been set, a confirmation will be sent to the Operator. The order scenario is that order intake takes place after the moment the HAS has been realized.

The patch order will be rejected in the following cases:

- The connection address does not exist in the availability checker;
- The connection is not available for ordering as it is in use by another Operator;
- The connection is already in use by the Operator however another order is already in progress.

Scenario: Emergency patch order

The emergency patch order is accepted.

Same conditions apply to emergency patch order as patch order.

The patch will be delivered on working days within the shortest delay. When the patch has been set, a confirmation will be sent to the Operator. The emergency order is possible is after the moment the HAS has been realized.

The patch order will be rejected in the following cases:

- The connection address does not exist in the availability checker;
- The connection is not free for ordering, as it is in use by another Operator;
- The connection is already in use by the Operator however another order is already in progress.

An extra fee will be charged for an Emergency Patch order.

### De-patch order

Operator uses a de-patch order to de-patch a specific fiber of an ODF connection.

Scenario: de-patch order

The de-patch order is accepted. The order is delivered within the applicable standard delivery period for this order scenario. At the moment Fiberklaar accepts the de-patch order, the Operator will receive a confirmation;

the de-patching will take place in the next days.

If a de-patch order does not meet acceptance conditions below, the de-patch order is rejected. Terms of acceptance are:

- The connection is in use by the Operator;
- The de-patch order comes from (or on behalf of) Operator who is tenant of the connection;
- There is no currently ongoing order on the connection.

## Portability

The following applies only to a scenario where an end customer migrates between 2 ISP's, both using the Fiberklaar infrastructure. All other ISP migrations are transparent to Fiberklaar and simply follow the activation/de-activation process.

A Subscriber can decide to migrate from one Service Provider to another Service Provider (portability). In order to have a clean process and as less downtime for the Subscribers , the following procedure will come into effect:

- The new Operator will capture the LOA (Letter of Agreement);
- Once the request for change for Operator is technically confirmed to the new Operator, the initial/donor Operator will be informed of this request through an auto-cess notification. This notification will contain the date on which the service will be officially transferred to the new Operator;
  - If there is a cancellation, Fiberklaar will take necessary actions to cancel the change of the Operator request (indicating the reason of such cancellation 'LOA received by Subscriber' to the requestor) and related auto-cess notification;
- The initial/donor Operator terminates the contract by deactivating the active services through software from the agreed date;
- The service interruption is minimal as the new Operator can perform activation of its service on the same date of the patching order request;
  - On the agreed date, Fiberklaar will remove the patch connecting Fiberklaar's ODF to initial Operator rack space or splitter in Fiberklaar's rack and perform the patch connection between Fiberklaar's ODF to new Operator rack space or splitter in Fiberklaar's rack (PON);
- Once the patch order has been successfully executed by Fiberklaar, both Operators will receive confirmation that the patch order has been executed and closed.

The Migration Order will be rejected in case:

- The connection address does not exist in the availability checker;
- The connection address does exist in the availability checker but based on the delivery status and Reason Not Connected (RNC) of the connection, the connection is not orderable;
- The connection address does exist, but the Operator is not mentioned as possible tenant at this connection address;
- The migration order is on a port already in use by the new Operator.

## Cancellation of a Patch, Emergency Patch, De Patch order or migration order

When a patch order or Portability order cannot be delivered by Fiberklaar for reasons attributable to Operator or when Operator cancels an order when Fiberklaar has already begun carrying out work for a patch following from that order, one off charges for the patch order will be charged.

## 9. Network capacity orders

Network capacity orders can be distinguished in Co location orders and LC WP fiber orders. Co location orders reserve capacity in the POP locations to install Operator hardware, or fiberpatches between hardware in POP locations (Network patches). LC WP fiber orders create capacity for the Operator to connect its hardware via the network fibers from a LC POP location to a WP POP location enabling ODF connections in the specific WP location.

### Co location order

The orders for co location run through the co location ordering interface as described in the Annex 2.4 – Operational Interfaces to Reference offer concerning the use of passive fiberglass networks.

Scenario: Co location

For Co location order intake following is required

- Reason of request;
- Number of HE to be used;
- Any desirable space due to e.g. heat generation;
- Placement near UPS required or not;
- Power peak and nominal usage;
- Volume peak and nominal level;
- Desired installation date.

Based upon order intake Fiberklaar will check the request and may hold consultations with Operator.

After positive decision Fiberklaar will issue:

- Confirmation for installation date;
- Supervision necessary / not necessary;
- Rack number and HE;
- Voltage position (from which follows UPS yes / no);

The co location order is accepted and implemented.

### LC WP fiber order

The orders for LC WP fibers run through the capacity ordering process as described in the Annex 2.4 – Operational Interfaces to Reference offer concerning the use of passive fiberglass networks.

Scenario: LC WP fiber order

For ordering network capacity the following must be stated:

- Reason for request;
- Starting point (port) of fiber (patch);



- End point (port) of fiber (patch);
- Desired installation date.

Fiberklaar will check the application and may hold consultations with Operator.

- After a positive decision, Fiberklaar will send a confirmation with the planned installation date;
- Fiberklaar places fiber patches and checks for correct operation by means of E2E measurement;
- Fiberklaar will send confirmation report to Operator once work has been done.

The LC WP fiber order is accepted and implemented within the applicable standard delivery period.

## 10. Improved Service Level orders

Operator uses an Improved Service Level Order to indicate the level of incident resolution of future Single incidents on the Connection. Operator has the possibility to order an Enhanced or Premium Service on top of standard service. Resolution times are specified in Annex 3 Service Level Agreement (SLA) to Reference offer concerning the use of passive fiberglass networks.

The Improved Service Level order is a separate order next to the Patch order. It is possible to send in an Improved (Add or Remove) Service Level Order. If patch is depatched or migrated out the Improved Service Level is also removed.

## 11. Forecasting

In order to ensure a reasonable operational workload, the Operator should see to a reasonable spread of its orders during the month. The maximum daily volume intake for the concerned month is defined as 10% of the volumes projected in the forecast for this month (such maximum daily volume does not allow the Operator to exceed the total forecasted volume for the concerned month). The orders exceeding on a daily basis the maximum daily volume intake are allowed to be exempted from the SLA conditions in Annex 3 Service Level Agreement (SLA) to Reference offer concerning the use of passive fiberglass networks. Fiberklaar is entitled to execute these orders on a best effort basis.

The forecasted volumes (all activation and access orders, distinguished as specified in 2.1 of Annex 2.2) are established by area. For those areas for which either the first HC has surpassed 2 years or reached a coverage of more the 70% of HC, the forecast of those areas can be added into a global forecast. The forecasts per month, both for area specific ones as the global forecast, will be submitted by Operator at least one month before the next quarter will start and will consist of minimal 3 upcoming quarters. Forecasts are considered definitive for the 2 months after the running month.

### Underrun

Underrun occurs when actual ordered volumes are below the forecasted volumes of all Operators. A reasonable underrun of the forecasted volumes can be absorbed by Fiberklaar and has no direct consequences for the Operator. 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 Operator, Fiberklaar reserves the right to reissue capacity reserved for Operator (both engineering and network).

## Overrun

Monthly overrun occurs when actual ordered volumes are above the forecasted volumes of all Operators. As from the first order exceeding the forecasted volume all orders of Operator for the remainder of the month will be considered in “overrun”.

## Annex 2.3 – Repair & Maintenance (R&M) to Reference offer concerning the use of passive fiberglass networks

**Annex 2.3 – Repair & Maintenance (R&M)**

**to**

**Reference offer concerning the use of  
passive fiberglass networks  
version 1.0**

**("ODF ACCESS")**

## Table of Content Annex 2.3

1	Introduction .....	84
1.1	General	84
1.2	Changes	84
2	Incidents .....	84
2.1	Information about operation of process interface Operator and Company	84
2.2	Priority of Service incidents	85
2.3	Incident process Fiber Network	85
2.3.1	Reporting	85
3	Other provisions.....	85
3.1	Maintenance of fiber network	85
3.2	Maintenance window	85
3.3	Scheduled maintenance	85
3.4	Emergency maintenance	86
3.5	Maintenance communication	86
3.6	Access Control	86

## 1. Introduction

This Annex contains the Repair and Maintenance (R&M) process regarding ODF Access on the FTTx Network.

### 1.1 General

The procedures for reporting and dealing with Service incidents and outages are described in the Annex Operational Interfaces.

### 1.2 Changes

In case of Service introductions, Service changes or process adjustments announced in accordance with Belgian Law, this Annex is no longer fully or partially up-to-date as a result of these Service introductions, adaptations announced in accordance with Belgian Law, and these adjustments shall be incorporated into a new version of this Annex thereof, which will automatically replace the old Annex.

## 2. Incidents

Fiberklaar accepts the incidents 24 hours a day, 7 days a week, via the interface described in the Annex 2.4 – Operational Interfaces to Reference offer concerning the use of passive fiberglass networks. Regular Incidents are divided into service and delivery incidents.

In the case of single operational Service incident, Operator makes an analysis, after which Operator decides whether this incident should be assigned to Fiberklaar. Incidents outside Fiberklaar's domain are repaired and handled by the Operator.

If assigned to Fiberklaar, Fiberklaar records each incident administratively by means of a ticket and assigns each ticket a unique number (the ticket number). The acceptance and administrative recording of a ticket is done at the same time, this is the ticket registration moment. All parties involved use this number for communication about the incident, and the management of this ticket

An incident is considered solved at the ticket ready time. This means that the Service is again available to Operator (or its Service provider or Subscriber) at the agreed quality level.

Main incidents, such as power failure or breach in a LC WP Fiber are monitored by Fiberklaar. Single connections are not monitored.

### 2.1 Information about operation of process interface Operator and Fiberklaar

Company offers (automated) process interfaces for the FTTx Network. The interface definition, the technical functioning of the interface, the process operation of the interface and the standardization of the fields will be made accessible to Operator.

## 2.2 Priority of Service incidents

Service incidents are distinguished into three priorities

Priority level	Description
1	One area of End Users is interrupted
2	4 or more Subscribers are interrupted (in same POP) or the quality of the service is reduced.
3	Single Incident reports, or <4 Incident reports of which it is likely that the Incident is caused by one and the same cause

Fiberklaar determines the priority based on the impact. The impact determines the escalation level and thus whether or not the escalation process will be used.

## 2.3 Incident process Fiber Network

The first line incident process aims to undo any unplanned Service interruption or quality degradation and thereby restores the Service at the agreed Service level and within the agreed resolution time. A (failure) to an active or passive component, which (as yet) has no impact on the Service, should also be seen as a first line incident.

If a first line incident cannot be resolved, a second line incident will be created. Second line incidents are usually incidents where digging work is necessary. Fiberklaar will make every effort and work continuously to restore the connection and, if possible, to make a temporary provision in the first line incident.

The Company uses the Workflow Management System (WMS) to receive and process an incident.

In an initial stage, Fiberklaar (or its contractor) will make the appointment with the end customer for any on site interventions needed to restore service. Conditional to the availability of sufficient resources, Fiberklaar expects to implement an appointment booking functionality by early 2023. This timeframe does not contain a commitment from Fiberklaar. The technical specifications as well as SLA's of this new service will be detailed out at a later stage.

## 2.4 Reporting

The WMS export function provides the functionality for Fiberklaar and Operator to draw up a SLA report. The WMS data is the leading source for SLA measurement data.

## 3. Other provisions

### 3.1 Maintenance of fiber network

Maintenance with impact on Fibers can take place in the POP's (LC's, WP), the LC WP fiber and also the FTTx Network.

### 3.2 Maintenance window

The maintenance window for scheduled maintenance on multiple connections is on all days between 00:00 am CET and 6:00 am CET.

### 3.3 Scheduled maintenance

Scheduled maintenance is a change to the Company network that will be announced to Operator if Operator's occupied connections are affected by the maintenance. Maintenance is announced when occupied connections are temporarily interrupted due to maintenance and the interruption affects more than one occupied

connection.

Scheduled maintenance takes place during the maintenance window and is announced if there is risk of service interruption at least 5 Business Days before execution or if there is no risk of unavailability/interruption this will be announced 3 Business Days ahead.

*Example: Due to reconstruction work, a cable must be shifted. No disturbed connections, planned work.*

#### 3.4 Emergency maintenance

In addition to the scheduled maintenance, there may also be emergency maintenance to make service repairs of affected Services. Recovery is based in consultation with Operator.

Emergency maintenance will be carried out, scheduled, as soon as possible in consultation with Operator.

#### 3.5 Maintenance communication

In the event of scheduled maintenance, Fiberklaar will provide at least the following information:

Announcement:

- Date, time and duration of maintenance;
- If possible, a specification of the (possibly) affected Services;
- Reason for maintenance.

Communication during work:

- Information of start work;
- Confirmation of closure of planned work.

#### 3.6 Access Control

In case Operator requires access to POP locations, Operator can request authorization for its staff carrying out activities at these locations. After approval and authorization, the concerned person will be provided with an access card by name. Fiberklaar uses an access system with remote monitoring and access provision where each unlock and lock is automatically recorded in a logging.

The following documents are available to Operator:

- Procedure access (co)locations;
- Safety regulations (co)locations;
- Rules of conduct (co)locations.



## Annex 2.4 – Operational Interfaces to Reference offer concerning the use of passive fiberglass networks

## **Annex 2.4 – Operational Interfaces**

**to**

**Reference offer concerning the use of  
passive fiberglass networks  
version 1.0**

**("ODF ACCESS")**

## Table of Content Annex 2.4

<b>1</b>	<b><u>PURPOSE AND SCOPE OF THIS DOCUMENT</u></b>	<b>90</b>
1.1	<u>OPERATIONAL INTERFACES</u>	90
1.2	<u>INFORMATION EXCHANGE &amp; IT LANDSCAPE</u>	90
1.3	<u>GENERAL</u>	90
1.4	<u>AMENDMENTS</u>	90
<b>2</b>	<b><u>INTERFACE OVERVIEW</u></b>	<b>91</b>
2.1	<u>INTERFACE FIBER PATCHING SERVICE</u>	91
2.2	<u>INTERFACE REPORT SERVICE INCIDENT</u>	91
2.3	<u>INTERFACE ACCESS POP LOCATIONS PLANNED</u>	92
2.4	<u>INTERFACE ACCESS POP LOCATIONS UNPLANNED</u>	92
2.5	<u>INTERFACE POST CONNECTION PROCESS HOMES PASSED (HP REMAINING ADDRESSES)</u>	92
2.6	<u>INTERFACE POST CONNECTION PROCESS HP à HC</u>	93
2.7	<u>INTERFACE REQUEST EMERGENCY PATCH</u>	93
2.8	<u>INTERFACE REQUEST FTU MOVE</u>	93
2.9	<u>INTERFACE REQUEST CAPACITY</u>	94
2.10	<u>INTERFACE ADDRESS CHECK</u>	94
2.11	<u>INTERFACE CLAIM</u>	94

## 1. Purpose and scope of this document

This document is intended to identify, define and to agree upon the operational interfaces between Fiberklaar and Operator within the Reference Offer. Operator will use Fiberklaar's FTTx Network and POP locations. Fiberklaar is providing Services for this purpose. This document describes the initially available interfaces, automated as well as manual, between Operator and Fiberklaar.

### 1.1 Operational Interfaces

For each operational interface the content, frequency and/or triggers, format and manner in which the exchange is performed are determined.

### 1.2 Information exchange & IT landscape

Fiberklaar and Operator will exchange the following information:

- During initial roll-out
  - Expected delivery date full Homes Passed scope
  - Homes Passed delivered
  - Homes Connected delivered
- After initial roll-out
  - # Homes Connected orders dispatched/received
  - # Homes Connected orders delivered

Both parties strive to maximize an automated process and have data processed through API's. Below a schematic overview of the proposed systems and interfaces is presented.

The APIs that will be developed between Fiberklaar and Operator are:

- Availability API (Availability Check – AC)
- Order API (Workflow Management System – WMS)
- Incident API (Workflow Management System – WMS)
- Address validation API (Availability Check – AC)
- Claim API (Bouwstraat – BS)

### 1.3 General

Ordering and Delivery interfaces are described in the Annex 2.4 – Operational Interfaces to Reference offer concerning the use of passive fiberglass networks.

### 1.4 Amendments

If as a result of (announced in accordance with Belgian Law) service introductions, adjustments to the service or process adjustments, this Annex is no longer fully or partially up-to-date, any necessary adjustments to this Annex shall be incorporated into a new version thereof, which automatically replaces the old Annex. In any case, any modification shall be done in consultation between Operator and Fiberklaar and shall be subject to prior approval by BIPT.

## 2. Interface overview

Interface number	Description
2.1	Fiber Patching Service (Patch/De-Patch/Telco-Telco)
2.2	Report Service Incident
2.3	Access WP/LC locations planned
2.4	Access WP/LC locations unplanned
2.5	Post connection for address not HP ready
2.6	Post-connection process HP -> HC (Homes Connected)
2.7	Request Emergency Patch
2.8	Request FTU move
2.9	Request Capacity
2.10	Address Check
2.11	Claim

### 2.1 Interface Fiber Patching Service

Interface number	Description
Name	Fiber Patch Service
Process area	Ordering & Delivery
Status	Final
Content	Ordering, change, cancel an ODF Patch, De Patch or Portability
Format	Order entry by Operator in ordering system
Channel	API or web portal WMS
Trigger	Customer Order
Notes	Will be handled according to appropriate SLA. Details in WMS Fulfillment flows

### 2.2 Interface Report Service Incident

Interface number	Description
Name	Service Incident
Process area	Repair & Maintenance
Status	Final
Content	Reporting a service incident by Operator
Format	Entering a service incident in the ticketing system
Channel	API or web portal in WMS
Trigger	Customer complaint
Notes	Will be handled according to appropriate SLA. Details in WMS assurance flows

### 2.3 Interface Access POP locations planned

Interface number	Description
Name	Access POP locations planned
Process area	Maintenance or new build (planned)
Status	Final
Content	Acquire access to a POP location to perform planned work to Operator equipment
Format	Fill out a form by Operator in order to ask permission to access a POP location by e-mail to .....
Channel	Standard e-form
Trigger	New- build, maintenance or incident servicing
Notes	Request to be done by authorized (listed) persons. Request limited to certified people with access badge

### 2.4 Interface Access POP locations unplanned

Interface number	Description
Name	Access POP locations unplanned
Process area	Repair & Maintenance (unplanned)
Status	Final
Content	Acquire access to a LC/WP location to perform unplanned work to Operator equipment
Format	Call from Operator in order to ask permission to access a POP location by phone to telnr: +32.....
Channel	By phone
Trigger	Incident on Operator equipment
Notes	Request to be done by authorized (listed) persons. Request limited to certified people with access badge

### 2.5 Interface Post Connection Process Homes Passed (HP remaining addresses)

Interface number	Description
Name	Post Connection Process Homes Passed (HP)
Process area	Ordering & Delivery
Status	0.9 version
Content	End User without HP wants to get a connection
Format	Operator/End User orders a connection in standard format
Channel	E-mail
Trigger	For Operator, status will change from HP to HC
Notes	Web portal in development. Notification of status change towards Operator in development. Address needs to be in known polygons.

## 2.6 Interface Post connection process HP à HC

Interface number	Description
Name	Post Connection process HP → HC
Process area	Ordering & Delivery
Status	Final
Content	Ordering to make connection in LU
Format	Order entry by Operator in ordering system
Channel	API or web portal WMS
Trigger	Customer Order
Notes	Will be handled according the appropriate SLA.

## 2.7 Interface Request Emergency patch

Interface number	Description
Name	Request Emergency patch
Process area	Ordering & Delivery
Status	0.9
Content	Ordering, patch
Format	Call from Operator
Channel	By phone
Trigger	Urgent customer order
Notes	Request to be done by authorized persons.

## 2.8 Interface Request FTU Move

Interface number	Description
Name	Request FTU Move
Process area	Ordering & Delivery
Status	0.9
Content	End customer requests move of FTU within LU
Format	Operator or Subscriber sends in standard form
Channel	E-mail
Trigger	End user wishes that the FTU in the LU is moved to another spot in the LU
Notes	Web portal in development. Notification of status change towards Operator in development. Address needs to be in known polygons.

## 2.9 Interface Request Capacity

Interface number	
Name	Request Capacity Service
Process area	Ordering & Delivery
Status	Final
Content	Acquire rackspace in specified POP/racknumber for installing network equipment and capacity in the Fiberklaar network
Format	Standard Form
Channel	Upload to sharepoint
Trigger	Operator extends network equipment in specific POP/rack or capacity in the LC WP Fiber
Notes	Request to be done by authorized person of Operator

## 2.10 Interface Address Check

Interface number	Description
Name	Address Check
Process area	Pre ordering
Status	Final
Content	Check connection status of Address
Format	Check by Operator in availability checker
Channel	API or web portal AC
Trigger	Customer Request
Notes	Will be handled according to appropriate SLA

## 2.11 Interface Claim

Interface number	Description
Name	Claim connection
Process area	Order & Delivery
Status	Final
Content	Submit a claim or unclaim for connection in rollout phase
Format	ISP or Operator sends in file or API request
Channel	API or SFTP server Bouwstraat
Trigger	Customer Request
Notes	



Annex 3 - Service Level Agreement (SLA) to Reference offer concerning the use of passive fiberglass networks

**Annex 3 – SERVICE LEVEL AGREEMENT (SLA)**

**to**

**Reference offer concerning the use of  
passive fiberglass networks  
version 1.0**

**("ODF ACCESS")**

## Table of Content Annex 3

<b><u>1</u></b>	<b>INTRODUCTION.....</b>	<b>98</b>
<u>1.1</u>	GENERAL PROVISIONS .....	98
<u>1.2</u>	GENERAL.....	98
<u>1.3</u>	AMENDMENTS.....	98
<b><u>2</u></b>	<b>TERMINOLOGY.....</b>	<b>98</b>
<b><u>3</u></b>	<b>BASIC SERVICE LEVEL AGREEMENTS .....</b>	<b>99</b>
<u>3.1</u>	KPI'S RELATED TO ORDERING AND PROVISIONING OF SERVICE ORDERS.....	99
<u>3.2</u>	KPI'S RELATED TO THE NETWORK MANAGEMENT PROCESS.....	101
<u>3.3</u>	KPI'S RELATED TO API'S BETWEEN OPERATOR AND COMPANY.....	104
<u>3.4</u>	STOP-CLOCK AND FREEZE RULES (VALID FOR BOTH PROVISIONING & REPAIR TIMERS).....	107
<b><u>4</u></b>	<b>IMPROVED SERVICE LEVELS .....</b>	<b>108</b>
<u>4.1</u>	REPAIR CASE RESOLUTION TIMER .....	109
<b><u>5</u></b>	<b>COMPENSATION SCHEME.....</b>	<b>110</b>
<u>5.1</u>	CLAIMING PROCESS.....	110
<u>5.2</u>	DUE BY COMPANY: COMPENSATIONS FEES .....	110
<u>5.3</u>	DUE BY OPERATOR: WRONGFUL REPAIR .....	111

## 1. Introduction

### 1.1 General provisions

This document defines the service level conditions upon which Fiberklaar will deliver ordering, installation and maintenance services for the passive access products.

Fiberklaar commits to respect the service levels for the Services provided by Fiberklaar to the Operator as set out in this document. The service levels outline the Key Performance Indicators (KPIs) agreed between Fiberklaar and the Operator and shall be used as performance measurement mechanism. KPIs are provided by Fiberklaar to the Operator on a monthly basis. These service level conditions (SLA) are applicable no later than 6 months as from the date of the first patch order from the Operator in the first 'Deployment Area' deployed by Fiberklaar.

Both Fiberklaar and the Operator agree that the objective of this document is to optimize operational collaboration and all efforts should be taken to avoid compensations or penalty fees. The terms and conditions of the Slot Availability SLA for orders submitted via the API interface are applicable within the limits of the forecasted volumes submitted by the Operator to Fiberklaar and this in line with the forecasting mechanism and deviations described in the *Service Description and Working Level Agreement* document.

Within the frame of this service level agreement, Fiberklaar offers the following service level parameters for the passive access products. For the sake of clarity, activities and incidents related to the active layer fall integrally under the responsibility of the Operator and are not in scope.

The structure of the Service Levels is articulated as follows:

- Terminology;
- Basic Service Level Agreements;
- Improved Service Level Agreements;
- Compensation Scheme.

### 1.2 General

Ordering and Delivery interfaces are described in the Annex 2.4 – Operational Interfaces to Reference offer concerning the use of passive fiberglass networks.

### 1.3 Amendments

If as a result of (announced in accordance with Belgian Law) service introductions, adjustments to the service or process adjustments, this Annex is no longer fully or partially up-to-date, any necessary adjustments to this Annex shall be incorporated into a new version thereof, which automatically replaces the old Annex. In any case, any modification shall be done in consultation between Operator and Fiberklaar and shall be subject to prior approval by BIPT.

## 2. Terminology

**Clock Hours:** Target Repair Time, expressed in Clock Hours, i.e. where the service to be provided by Fiberklaar is available 24 hours per day, 7 days a week.

**Closure date:** the date when all administrative actions required to close the order are completed. The closure date is the date of the generation of the Order Closed message.

**Fiberklaar Technician:** a technician or splicer (employee or subcontractor) who, under the responsibility of Fiberklaar, executes the required tasks to technically provide the requested service.

**Force Majeure Event:** has the meaning given to it in the Reference Offer.

**Incident Intake:** the creation of repair cases in the Incident management tooling for the repair of Fiberklaar services.

**Intervention Time (Gross):** The intervention time is the duration calculated from the concerned Incident Ticket Opening to the Operator until Fiberklaar intervenes in order to repair the circuit.

**Intervention Time (Net):** The gross intervention time minus the Stop-Clock Time minus the Out of Window Time.

**Order (in provisioning):** a set of tasks to be executed by a technician (or splicing team) at a given time and at (a) given location(s) to perform the provisioning of an ordered product.

**Out of Window Time:** any time outside the Intervention Time.

**Overrun orders:** orders exceeding the monthly forecast of the Operator for the passive access products. The monthly forecast defines the number of orders the Operator estimates to submit towards Fiberklaar. For any order in “overrun”, no guarantee will be offered and they will be carried out by Fiberklaar as soon as possible, according to the remaining capacity available.

**Receipt of the order:** an order is received by Fiberklaar if it passes positively the encryption and authentication phase.

**Repair case:** the file created in Fiberklaar’s incident management tooling when an Operator reports a problem. This file contains the information already available in the IT systems, the information provided by the Operator and the information added by Fiberklaar during the repair process.

**Stop-Clock Time:** the time during which the timer is stopped during provisioning or repair activities for reasons not attributable to Fiberklaar or one of its subcontractors or suppliers (see sections “Stop-Clock or Freeze rules” (Provisioning and Repair) of this document).

**Third Party:** any other involved entity beside Fiberklaar and the Operator. We distinguish three types of Third Parties who can intervene in the operations from a general viewpoint: a Third Party of the Operator, a Third Party of Fiberklaar and an independent Third Party (e.g. commune).

**Working Hours:** any time from 8:00 to 16.30 during Business Days.

### 3. Basic Service Level Agreements

This section includes the most relevant timers in the operational processes’ framework. The timers as set out hereunder are binding and a revision of these timers is possible after agreement between Fiberklaar and the Operator.

The structure of this section is articulated as follows:

1. KPI’s related to ordering and provisioning of Service Orders;
2. KPI’s related to the network management process;
3. KPI’s related to API’s between Operator and Fiberklaar;
4. Stop-Clock & Freeze Rules (valid for both provisioning & repair timers).

#### 3.1 KPI’s related to ordering and provisioning of Service Orders

The provisioning of connection is the installation of the passive access products on the connection of a single Living Unit. Fiberklaar distinguishes two types of Service Orders being 1) Post Construction order on an address marked HP in Availability Checker (AC) (with or without underground splicing) and 2) Patch Order on an address

marked HC in Availability Checker (AC).

In the scope of provisioning, 2 end-to-end performance indicator shall be measured and reported by Fiberklaar:

- Executed
- First Time Right
- **Executed**

#### Definition

The Executed indicator measures the number of orders executed and administered in respect of their Service Level. An order has respected the Service Level if the realisation date is on the same date or earlier as the Service Level communicated to the Operator for this order.

#### Service Level

For each Order subject to SLA, the Executed indicator must be within the following timers (expressed in Working Days, per type of order):

Type of order	Service level	leadtime
Patch order on HC address	95%	5 Business days
Post construction order on HP address – underground	95%	20 Business days
Post construction order on HP address – façade	95%	10 Business days

Fiberklaar will provide to the Operator the execution date of the order once its suppliers (subcontractors) have communicated its planned date. Any change to that date will be communicated within the shortest delay possible.

The service levels stated in the above table are subject to change, based on the contractual agreements to be made by Fiberklaar with its necessary suppliers (subcontractors). In any case, any modification shall be done in consultation between Fiberklaar and the Operator and shall be subject to prior approval by BIPT.

Minimum 95% of the orders must respect their Service Level.

#### Applicability of the SLA

The Executed SLA is only applicable to orders:

- Installed by a Fiberklaar Technician.
- Not falling in the scope of projects (i.e. mass migrations, orders with a project ID).
- Aligned with the forecasting described in the Annex 2.2 - Ordering and Delivery (O&D) Reference offer concerning the use of passive fiberglass networks and not exceeding the forecasted volumes. Within this monthly forecasting, Fiberklaar aims at balancing as far as possible the total number of forecasted monthly orders in a weekly available capacity.

### Key Performance Indicator

Monthly computation is as follows:

$$\% \text{ orders within Executed SLA} = \frac{\text{Number of orders for which the Due Date was reached (1)}}{\text{Total number of orders (2)}}$$

1. Total number of orders respecting the Executed SLA and having their realisation date within the considered monthly period.
2. Total number of orders for which the realisation date is within the considered monthly period.

- **1.6 First Time Right (FTR) installation**

#### Definition

Non-First Time Right: a repair case created by the Operator within 14 calendar days after the Patch Order execution date consecutive to an intervention performed by Fiberklaar, giving an incident located on Fiberklaar's passive access network and under the responsibility of Fiberklaar or a Third Party working for Fiberklaar, is considered non-FTR. Any other intervention is considered FTR.

#### Service Level Agreement SLA

Minimum 95% of the lines brought into service by Fiberklaar must be FTR.

Applicability of the SL The FTR SLA is only applicable to orders:

- Submitted to Fiberklaar through the API interface
- Orders that have not met the FTR service level but caused by reasons outside of Fiberklaar domain are excluded from the calculation.

### Key Performance Indicator

Monthly computation is as follows:

$$\% \text{ First Time Right} = \frac{\text{(Total number of orders having respected the FTR)}}{\text{(total numbers subject to FTR)}}$$

### 3.2 KPI's related to the network management process

In the scope of Network Management, 4 indicators to measure Fiberklaar's performance are identified:

- Repair Case Resolution Timer on the connection;
- Passive Network Availability;
- Planned Work notification timer.
- Wrongful Repair

- **Repair Case Resolution Timer on the End-user connection**

Definition

The Repair Case Resolution Timer on the connection starts when Fiberklaar receives an incident report from the Operator and ends at the closure of the repair case by Fiberklaar. Fiberklaar will do its utmost to confirm the resolution with Operator before closure of the repair case.

Service Levels

Repair cases should respect the following timer:

	%	Timer
<b>Repair Timer connection without splicing</b>	90	10 working hours following the opening of the repair case
	95	18 working hours following the opening of the repair case
<b>Repair Timer connection with splicing</b>	80	6 working days following the opening of the repair case
	90	10 working days following the opening of the repair case

These timers will be evaluated 12 months after first Patch Order.

Applicability of the SLA

- The Basic Service Repair SLA provided by Fiberklaar is available during Working Hours;
- If an appointment is needed at the Subscriber address or at the Third Party site, Fiberklaar arranges the appointment with Subscriber or Third Party. Fiberklaar informs Operator of progress.

Repair prioritisation:

- In case multiple Subscribers are impacted by the same incident cause (e.g. cable cut, LC WP fiber impact), Fiberklaar will endeavour to resolve the incident as soon as possible. In any case, the Operator will be informed of this general infrastructure incident and notified once closed.
- Secondly, the Subscriber connection will be repaired according to the services levels in place.

Key Performance Indicator

Monthly computation is as follows:

$$\begin{aligned}
 & \% \text{ Repair Case Resolution Timer} \\
 & = 100\% - \frac{\left( \begin{array}{c} \text{Number of repair cases that impact a single End User} \\ \text{with Fiberklaar responsibility} \\ \text{not closed within the Repair Timer} \end{array} \right)}{\text{Total number of repair cases}}
 \end{aligned}$$



- **Passive Network Availability**

Availability is equal to the annual net timer of interruption due to incidents on Fiberklaar’s passive network (between LC POP & FTU demarcation points ) divided by the total time per year of availability. The time of interruption is defined as from the repair case start Repair case Resolution Timer for an incident that has been sorted out as being under Fiberklaar’s responsibility, excluding conditions of a Force Majeure Event, Stop-Clocks, “Planned Works”, neglect, incorrect use or misuse of the service and/or FTU by the Subscriber, power incidents, a modification/change request initiated by Operator or Subscriber and Repair Requests falling under the responsibility of the Operator (active layer part (including splitters)) up to the moment of the case closure, mentioned to the Operator with information about the reason of the outage.

	<b>Average yearly Network Availability</b>
<b>Passive Network Availability</b>	99.7%

The Passive Network Availability is applicable for an Operator with a minimum of 5000 Homes Activated on the total Company network.

- **Planned work notification time**

Definition

The Planned Work process entails the coordination of all deployment and maintenance activities that take place on Fiberklaar’s network with (potential) impact on Subscriber connectivity. All planned work that might potentially have an impact on a service or services is performed within Fiberklaar’s service window. The Planned Work notification timer covers the minimal notification period from Fiberklaar to the Operator.

Fiberklaar distinguishes two different types of activities:

1. Activities impacting the service;
2. Activities with risk of impacting the service.

Service Levels

The service window runs from: Monday to Sunday, between 00h00 hours and 06:00 hours (CET). In case very specific interventions would require an extension of the service window outside of the standard window, prior communication and alignment thereof will be done with the impacted Operator(s).

1. Activities impacting the service are announced at least 5 Business Days prior to the commencement of the work or the shortest time window that is possible based on Subscribers’ selected date and time.
2. Activities with risk of impacting the service are notified at least 3 Business Days prior to the commencement of the planned work.

Applicability of the SLA

Emergency repairs are excluded from this rule and will be notified as soon as possible. Activities impacting a customer only relate to a single connection and are scheduled and carried out in mutual consultation.

- **Wrongful Repair**

Definition

The “Wrongful Repair Request” indicator measures the number of repair cases where the cause of the incident is not attributable to Fiberklaar or a Fiberklaar’s Third Party and compares it to the total number of repair cases introduced by the Operator for the period of reference.

Service Levels

Minimum 95% of the repair cases must be closed without having encountered a “Wrongful Repair Request”.

Applicability of the SLA

The “Wrongful Repair Request” SLA is only applicable to incidents reported to Fiberklaar through the valid points of entry as described in the Annex 2.

Key Performance Indicator

Monthly computation is as follows:

$$\begin{aligned} \%Wrongfull\ Repair & \\ &= (Number\ of\ incidents\ with\ cause\ not\ attributable\ to\ Fiberklaar) \\ &/(Total\ number\ of\ reported\ repair\ cases) \end{aligned}$$

3.3 KPI’s related to API’s between Operator and Fiberklaar

This section includes the SLAs relating to the API interfaces that Fiberklaar puts at disposal of the Operator for eligibility, ordering, provisioning or repair of its passive access products.

In the scope of API timers, 2 indicators to measure Fiberklaar’s performance are identified:

- Interface Response Time;
- Interfaces Availability.

- **Interface Response Time**

Definition

The Interface response time is the time taken by Fiberklaar interfaces to provide feedback to Operator. Interfaces are split in Provisioning interfaces for Pre-Checks and Ordering service operations and Repair interfaces for Ticket operations. The response times are calculated based on the time stamps of the applications receiving the request and generating the feedback.

### Service Levels

For the Pre-Checks, Ordering and Repairs entered through the API interface, Fiberklaar will endeavour to not exceed the response times mentioned in the following table. These response times are dependent on the type of interface and the type of service operation:

<b>API - Max response time:</b>	<b>Via API interface</b>
For Pre-check calls*	5 seconds
For Submitted Client Order calls	5 seconds
For Submitted Client Repair calls	5 seconds

\* Call contains information of one connection. It is also possible to check multiple connections at once, longer response times then apply

Fiberklaar will guarantee an SLA respect of 95%. Both the timers and SLA level might be subject to change in function of the upcoming agreed upon IT architecture. In any case, any modification shall be done in mutual agreement between Fiberklaar and the Operator and shall be subject to prior approval by BIPT.

### Applicability of the SLA

The Provisioning Interface response time will be measured by Fiberklaar on a basis of 6 days (Monday to Saturday) a week (from 8h00 to 20h00). The Repair Interface response time will be measured by Fiberklaar on a basis of 6 days (Monday to Saturday) a week (from 8h00 to 20h00), 24x7.

The following cases will be excluded from the calculation:

- Force Majeure Event;
- Calls where responses contain multiple connections;
- Maintenance works that are announced by Fiberklaar via the agreed communication channel or any equivalent means;
- Unavailability of the API interface announced to the Operator by Fiberklaar.

### Key Performance Indicator

The SLA "Interface response time" will be calculated yearly per API as follows for the passive access products ordered and serviced through the API interface by the Operator:

$$\% \text{ Response Time respected} = \frac{\text{Number of requests within Maximum Response time}}{\text{Total number of requests entered through the API interface}}$$

- **Interfaces Availability**

Definition

The following interfaces used by the Operator for eligibility, ordering or repair of its passive access lines are subject to an Availability SLA:

- API Pre-check interface;
- API Provisioning interface;
- API Repair Interface.

The Availability SLA will be measured separately by Fiberklaar for these interfaces.

Service Levels

For the Pre-Checks, Ordering and Repairs entered through the API interface, Fiberklaar will endeavour to reach the availability mentioned in the following table. These availabilities are dependent on the type of interface and the type of service operation:

<b>SLA API Interfaces – Availability</b>	<b>Via API interface</b>
For Pre-check calls	98%
For Submitted Client Order calls	98%
For Submitted Client Repair calls	99%

The SLA level might be subject to change in function of the upcoming agreed upon IT architecture. In any case, any modification shall be done in mutual agreement between Fiberklaar and the Operator and shall be subject to prior approval by BIPT.

Applicability of the SLA

The Availability of each interface will be measured by Fiberklaar on a basis of 6 days (Monday to Saturday) a week (from 8h00 to 20h00). For the API Repair interface Evolution to 24/7 6 months as from the date of the first patch order from the Operator.

The following cases will be excluded from the calculation:

- Force Majeure Event;
- Maintenance works that are announced by Fiberklaar at least 3 Business Days in advance via the agreed communication channel or any equivalent means.

Key Performance Indicator

The availability SLA will be calculated on a monthly basis by Fiberklaar at the level of access to each interface.

3.4 Stop-Clock and Freeze Rules (valid for both provisioning & repair timers)

- **Provisioning**

A Stop-Clock principle is applied to the Executed Timer. The Extended Timer will be frozen by a Stop-Clock in case a “temporarily impossible” or a “report work order” message is sent to the Operator during the order entry of

the line. The Extended Timer is resumed at the resolution of the “temporarily impossible”.

If the Stop-Clock procedure is used, this shall be fully documented in the System, which will set out the:

- Reason for stop-clock.
- Timing.

This information is inherently included in the messages exchanged between the Operator and Fiberklaar through the API interface.

- **Repair**

A Stop-Clock principle is applied to the Repair Timer. The Repair Timer will be frozen by a Stop-Clock in case a “temporarily impossible” or a “report work order” message is sent to the Operator during the repair of the line. The Repair Timer is resumed at the resolution of the “temporarily impossible”.

There are various scenarios in which Fiberklaar will use the stop-clock procedure during the repair process. Freeze rules will be applied whenever the cooperation with the Operator is made impossible, following examples (not exhaustive):

- Cooperation with the Operator is impossible due to the absence of staff on the local site, there is no possibility of accessing the site or, despite several attempts, the Operator contact point has proved impossible to contact by phone;
- End user asks Fiberklaar for the repair to be postponed or the appointment if applicable to be rescheduled;
- A repair case is opened, and the Operator does not allow Fiberklaar to interrupt the line in order to perform tests;
- Awaiting feedback, input or confirmation of the Operator or a Third Party (of the Operator or independent one) that prevents Fiberklaar from proceeding to repair actions;
- In any case of incomplete or manifestly incorrect information provided by the Operator with relevance for the repair process. The timer will be unfrozen after the Operator has provided the necessary information;
- In case the appointment is scheduled with the Subscriber/Third Party (of the Operator or independent one) outside the SLA due time. In this case, the timers will be applicable as from that date. Fiberklaar will resume the counting of the Repair Timer as of the beginning of the booked slot.
- End user is absent at the appointment date .

The Stop-Clock information is inherently included in the messages exchanged between the Operator and Fiberklaar through the API interface.

- **Evaluation**

In the first year after the first patch Fiberklaar will strive to evaluate all Stop clock and Freeze rules. This set up will be evaluated in the last months of this period.

#### 4. Improved Service Levels

The present section defines the specific Terms and Conditions upon which Fiberklaar will repair passive access lines in case an Improved Service Level (ISLA) option is activated for those lines.

The Improved Repair Service Premium SLA provided by Fiberklaar is available 24 hours per day, 7 days a week. The Improved Repair Service Enhanced SLA provided by Fiberklaar is available 15 hours per day (from 7:00 to

22:00), 6 days a week (from Monday to Saturday). Fiberklaar is committed to achieve for the passive access products the best possible quality standards; as such the timers indicated in this document are maximum time intervals.

Fiberklaar shall offer the following two Improved SLA's

- Repair Case Resolution Timers Enhanced
- Repair Case Resolution Timers Premium

Additional services levels can be added upon forthcoming agreements between Fiberklaar and Operator.

#### 4.1 Repair Case Resolution Timer

- **Definition**

The Repair Case Resolution Timer on the connection starts when Fiberklaar receives an incident report from the Operator and ends at the closure of the repair case by Fiberklaar. Fiberklaar will do its utmost to confirm the resolution with Operator before closure of the repair case.

In any case it is the responsibility of the Operator to inform its Subscriber about the potential visit of a Fiberklaar Technician. However, when required and upon explicit approval of the Subscriber, Fiberklaar will be entitled by the Operator to contact the Subscriber to arrange an appointment.

	<b>ISLA Premium</b>	<b>ISLA Enhanced</b>
Repair Case Creation	24/24 hours, 7/7 days	24/24 hours, 7/7 days
Repair Case Handling	24/24 hours, 7/7 days	15/24 hours, 6/7 days
Repair Intervention Window	24/24 hours, 7/7 days	15/24 hours, 6/7 days

*Note: 15 hours relate to 07h00 to 22h00*

*Improved Service Levels (ISLA)*

	<b>Repair Case Handling and intervention window</b>	<b>%</b>	<b>Repair Timer of the Passive Access Connection without splicing</b>
ISLA Enhanced	Extended Office Hours	75	5 hours
		90	10 hours
ISLA Premium	24/7	85	4 hours
		95	8 hours
		98	48 hours

- **Applicability of the SLA**

Fiberklaar requires cooperation of the Operator to reach the repair times. If Subscriber appointment is required and it is not possible to make the Subscriber appointment in time the service level is considered reached for this case. The Repair Timer on the connection is not applicable to incidents related to the active layer falling under

the responsibility of the Operator. The Repair Timer applies to all types of incidents, excluding incidents which require splicing work. All SLA times will be evaluated one year after first Patch order of Operator.

- **Key Performance Indicator**

Monthly computation is as follows:

$$\% \text{ Repair Case Resolution Timer} = 100\% - \frac{\text{Number of repair cases with} \\ \text{( Fiberklaar responsibility )} \\ \text{not closed within the Repair Timer}}{\text{Total number of repair cases}}$$

## 5. Compensation Scheme

Compensations are due to the parties in the cases that parties have not respected its commitment Provisioning and Repair Timers impacting the Subscriber experience, excluding the cases in which the party is responsible for the delay or in the case of "Force Majeure". For each missed SLA, the number of deviations is multiplied by a flat-rate unit compensation (lump sum in €) to which the party is entitled for the target as defined in the related SLA. The total compensation due by the party is the sum of the compensations calculated for each SLA target and will be taken into account in the annual final statement.

Compensations will be settled through an party invoice without VAT. In case several timers are not reached for a same repair case /order for a same SLA, the highest compensation can only be claimed by the Operator to avoid counting twice a compensation due to a same incident.

Quality meetings will be organized between Fiberklaar and the Operator in order to compare the amounts of compensation that have been assessed by both parties.

All the means to check individual KPIs are made available to the Operator through the Provisioning & Repair API interface and their related notifications.

### 5.1 Claiming Process

Operator will take the initiative after each calendar year to compute the compensations due by Fiberklaar. Fiberklaar will issue the annual SLAs report applicable to the Operator for the previous calendar year within maximum 1 (one) month after the concerned calendar year. Operator will sent the proposed compensations statement to Fiberklaar within maximum 1 (one) month upon receiving annual SLAs report. Fiberklaar will upon receipt verify the compensation report and, in case of rejection, will motivate the reason of such rejection within a timeframe of maximum 1 (one) month. Once agreed between both Fiberklaar and the Operator, the Operator has to issue its own invoice without VAT to Fiberklaar.

### 5.2 Due by Fiberklaar: Compensations Fees

For the avoidance of doubt, all the compensations below and any other that may be added afterwards constitute the sole remedy available to parties and do not constitute, in any circumstances, a ground to forfeit parties right to trigger escalation in case of structural under-performance by the other party.

**Order Not Executed:** In cases that Fiberklaar has not respected the committed percentage as indicated in the definition of the Executed SLA, the Operator will be entitled to a compensation per order not executed within Service Level in the related period.

	Compensation
Per order not executed within Service Level	40€



**First Time Right:** In cases that Fiberklaar has not respected the committed percentage as indicated in the definition of the First Time Right SLA, the Operator will be entitled to a compensation per non first time right intervention in the related period.

	Compensation
Per order not FTR	100€

**Repair connection Timer (SLAs)** In cases that Fiberklaar has not respected its commitment to repair the connection within the minimum agreed lead times, the Operator will be entitled to a compensation per repair case, with a total monthly maximum of 100% compensation of the Monthly rental per line.

	Type of repair timer	Compensation
Basic SLA	Repair Timer Escalations – whether or not with a splicing intervention	150 % of the daily rental fee per Working Day
Enhanced SLA	< 75% in 5 Working Hours	50% of the (line +SLA) Monthly rental per repair case resolved in more than 5 Working Hours
	Between 75% and <90% in 10 Working Hours	50% of the (line +SLA) Monthly rental per repair case resolved in more than 10 Working Hours
Premium SLA	< 85% in 4 Clock Hours	50% of the (line +SLA) Monthly rental per repair case resolved in more than 4 Clock Hours
	Between 85% and <95% in 8 Clock Hours	50% of the (line +SLA) Monthly rental per repair case resolved in more than 8 Clock Hours
	Between 95% and <98% in 48 Clock Hours	50% of the (line +SLA) Monthly rental per repair case resolved in more than 48 Clock Hours

### 5.3 Due by Operator: Wrongful Repair

In case of a repair case where the incident is actually not located on Fiberklaar’s network infrastructure and Fiberklaar has performed work for that repair case, useless costs are incurred for Fiberklaar. To encourage the Operator to perform a prior check on the line and on the connected equipment, Fiberklaar will bill an incentive fee to the Operator. There will be an indication of the repair case reference and the cause of the “Wrongful Repair Request”.

In case of a Wrongful Repair Request by Operator the following fee will be due by the Operator in case when Operator is not able to meet the amount of right repairs. If not reached by Operator the wrongful Repair Request Fee will be charged to all Wrongful repairs in the period.

	<b>Compensation Per intervention</b>
Wrongful Repair Request fee	€100
Minimal Amount of right repairs	>95%

## Annex 4 - Deployment projection

Fiberklaar has the ambition to roll out FTTH for 1.5 million homes in Flanders in the period of 2021 till 2028. All information on deployment will be made available as soon as Fiberklaar has more insight into its expected deployment plan and in accordance with below principles.

The rollout of Fiberklaar's network will be planned on a project by project basis. A project is an area where Fiberklaar seeks to build its network and connect homes to this network. A project has on average a size of 15k HP, dependent on the scope of the area.

### **Yearly forecast**

Each year in November, Fiberklaar will provide a forecast of the total number of addresses in scope of the deployment in the year thereafter, without identification of the geographical areas concerned. The actual number of addresses subject to deployment in the forecasted year may differ up or down from the forecast.

### **Quarterly forecast**

On a quarterly basis, a file is shared containing the forecasted and planned projects.

**The information for the forecasted projects** will list all the projects which are in preparation phase.. The following information is shared:

- (1) Area name
- (2) Geographical area concerned
- (3) Number of addresses in preparation scope
- (4) Forecasted start date of construction

**The information for the planned projects** will list all the projects which are planned to start construction in the current quarter or are in construction phase. The following information is shared:

- (1) (Sub-)area name
- (2) Geographical area concerned
- (3) Number of addresses in construction scope
- (4) (Planned) start date of construction
- (5) The forecasted end date of 80% of the rollout phase

### **Access Register**

In the preparation phase a first version of the addresses in preparation scope is available in the Access Register.

At the start of construction phase, the final list of addresses in scope for construction will be uploaded in the Access Register. During the construction phase, the status of the individual addresses will be updated and can be consulted in the Access Register. Upon request, Fiberklaar can send an extract of the Access Register on a daily basis.

The Access Register contains:

- a. The start date of construction in area (empty if not yet started)
- b. The LC and WP is indicated per address
- c. Status updates of addresses during construction: 'Planned', 'Home Connected' (HC) or Home Passed (HP).

- i. 'Planned': the status of addresses in the scope list will be in a 'Planned' status as long as it is not 'Home Connected' or 'Home Passed';
- ii. 'Home Connected': the status of an address will change to 'Home Connected' status only when both the following conditions are being met:
  1. the connection from FTU via the POP (WP) to the LC is constructed and the physical connection can be used, and
  2. The 'Home Connected' status includes the readiness for the WP and LC (transparent for the Operator/ISP)
- iii. 'Home Passed': homes where fiber passes on public domain but where the connection isn't (yet) or could not be installed on private property (owner did not give permission) will get the 'Home Passed' status. This status will only appear after the end of the project. When there is a technical or administrative reason this address did not reach the status Homes Passed, the status gets a separate indication. The technical or administrative issue can change over time.

### **LC location for backhaul by Operator**

To deliver services by ISP/Operator the Operator needs to provide the data transport service (see Annex 2), therefore the Operator should build his backhaul link to the LC of the area where the ISP using the service of the Operator wants to deliver services. For Operators building backhauls to the LC locations, separate information will be shared:

- As soon as possible, Fiberklaar will communicate
  - the possible location of the LC or, if the possible location is not yet available, Fiberklaar will communicate the geographical circle where the LC should be located, and
  - the tentative ready for installation (RFI) date
- As soon as the exact location is final, Fiberklaar will communicate:
  - The exact location of the LC
  - The planned RFI date
- POP Planning
  - For Operators who will have passive equipment in the WP the POP planning will be shared on a regular basis.
  - Information which will be shared is: planned dates (subject to changes).
  - Operator is responsible for requesting the Co location service in the POP locations (WP and LC) through the appropriate interface as specified in annex 2.

Preferably the Operator will build his backhaul network to the LC location maximal in synergy with the construction works of Fiberklaar for the part situated in the deployment area. Regular operational follow-up meetings will be planned.

### **Project roll-out**

There are 2 phases of a project: the preparation phase and the construction phase.

#### *Preparation phase*

- (1) In the preparation phase the feasibility of a project is checked on different parameters (cost, timing, appetite, ...). It is the sole decision of Fiberklaar to weigh these parameters and to prioritize a project and finetune the scope of a project based on this information.
- (2) The list of addresses in the scope evaluation will be shared via the Access Register, as specified in Annex 5 (Commercial Campaigning Principles) with the goal to give the ISP/Operators the time to prepare their campaigns in accordance with the modalities of Annex 5. During the preparation phase of the project the scope is finetuned. This means addresses could still move to out-of-scope and/or new addresses could be added.

### *Construction phase*

The construction phase is the phase during which a project is effectively deployed in a geographical area. The construction of a network is subject of a lot of external factors. Planning information is subject to change. An area can be divided in sub-areas and the information can be detailed on sub-area level. The division and the decision on sub-areas is the sole decision of Fiberklaar. The information sharing is done on 2 levels, being via the quarterly forecast and via the Access Register.

## Annex 5 - Commercial campaigning principles

### 1. Introduction

Fiberklaar and the Operator realize that a profitable roll-out of the FTTx Network in the Flanders region of Belgium requires the strong involvement of both the Operator and Fiberklaar, and a close co-operation.

The objectives of these Commercial Campaigning Principles are the following:

- a) Create awareness on fiber
- b) Develop public support and network of local ambassadors
- c) Capture network access demand, which translates into an intention of the Subscriber (and/or building owners) to allow for passive fiber termination into the premises (HC) and potential active connections
- d) Stimulate network access demand allowing Operator and/or Service Provider to contract Subscribers for fiber subscriptions (HCO/HA), to generate prospects, whereby the prospect decides which Operator or Service Provider may receive his data and can contact him for a follow-up.

Fiberklaar and Operator agree to collaborate for the purpose of creating awareness regarding the deployment of the FTTx Network in accordance with the principles set out below.

### 2. Information to be provided by Fiberklaar

Fiberklaar shall maintain an up to date file which shall include:

- (5) Name of the geographical area concerned
- (6) Planned start date of construction
- (7) Addresses in the preparation scope (will be shared via Access Register)

Fiberklaar shall make the information available to Operator in accordance with Annex 4 – Deployment Projection.

### 3. Local awareness campaign

Fiberklaar shall perform a local awareness campaign in the area where deployment of the network is planned. The timing and modalities of the awareness campaign shall be determined by Fiberklaar on a non-discriminatory basis depending on the start date of the civil works, the duration of the civil works, and past experience.

A local awareness campaign is divided into three phases:

- (1) A “Tease” phase (approx. two weeks);
- (2) A “Touch” phase (approx. two weeks);
- (3) A “Tell” phase (approx. four weeks).

During a local awareness campaign, Fiberklaar shall

- conduct marketing activities via all available channels to raise general public awareness of the FTTx network rollout, without discrimination of Operators or Service Providers.
- abstain from direct and indirect comparison of Operators or Service Providers, and of their offerings on the fiber network. Fiberklaar is allowed to promote the general advantages of the fiber network over DSL and Cable networks.

- abstain, to the extent reasonably possible, from direct marketing efforts towards Subscribers who already committed to sign up with Operator or Service Providers services via the Fiberklaar network.

If a potential Subscriber approaches Fiberklaar and requests to be put into contact with an Operator or Service Provider, Fiberklaar will pass that contact on to Operator or Service Provider.

To avoid confusion and overlapping communication, it is advised that the Operator not actively approach or target potential Subscribers in the geographical area during the local awareness campaign, but still continue to respond passively to queries and pre-orders if they are approached by (potential) Subscribers.

#### **4. Start event**

Fiberklaar may end a local awareness campaign with the organisation of a start event where Fiberklaar will invite potential Subscribers and where Fiberklaar, the Operator and possible Service Providers may be represented.

#### **5. Data exchange**

Once the Operator (or its Service Provider) has entered into contracts with Subscribers, the Operator agrees and undertakes to provide Fiberklaar with the claims on the relevant addresses within approximately 1 week.

#### **6. Operator relying on Service Provider**

If the Operator relies on a Service Provider for a given geographical area, the Operator agrees and undertakes to pass the obligations and restrictions of this annex to such Service Provider.

## Annex 6 - Data protection

1. For the purpose of this Annex 6, “**Data Protection Legislation**” shall mean (i) Regulation 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation) (“**GDPR**”), and (ii) EU Directive on Privacy and Electronic Communications (“**Directive 2002/58/EC**”), and (iii) all applicable EU member state laws or regulations giving effect to or corresponding with the GDPR and Directive 2002/58/EC, all as may be amended, supplemented or replaced from time to time.

All other terms used in this Annex 6 shall have the meaning ascribed to them in the Data Protection Legislation unless otherwise stated or self-evident from the context.

2. Each party, when processing personal data under or in connection with the Reference Offer, determines alone (and not jointly with any other party) the purposes and the means of such processing. Each party shall therefore act as a separate data controller.
3. Fiberklaar and Operator agree that personal data may be shared between the parties under or in connection with the Reference Offer, including (without limitation) in connection with the provisions of article 8 (Access Register).
4. When processing personal data under or in connection with the Reference Offer each party shall:
  - (a) Comply with its obligations under the Data Protection Legislation;
  - (b) Be responsible for providing the information referred to in articles 13 and 14 of the GDPR to the data subjects;
  - (c) Not do or permit anything to be done through act or omission which would cause the other party to incur any liability under the Data Protection Legislation;
  - (d) Ensure that it shares the personal data with the other party in a secure manner;
  - (e) Provide reasonable assistance, information and co-operation where requested by the other party in respect of data protection matters, including:
    - In respect of any matter which in the reasonable opinion of the other party is required for ensuring that party’s continued compliance with the Data Protection Legislation;
    - In respect of any claim and/or exercise or purported exercise of rights by a data subject under the Data Protection Legislation or any investigation or enforcement activity by the Belgian Data Protection Authority (“*Gegevensbeschermingsautoriteit*” / “*Autorité de protection des données*”) or any other Regulator, which relates to or is connected with the other party’s processing of personal data under or in connection with this Reference Offer; and
    - Any breach of security, including any breach of this Annex 6 and/or any loss, destruction, damage of, or compromise to, any personal data.