



Offer covering the Fibre Access to the terminating segment of EPT's point-to-point FTTH infrastructure (FAO)

Entreprise des Postes et Télécommunications

Prices in Euro

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1 Introduction

1.1 Purpose

This Fibre Access Offer (“FAO”) presents the terms and conditions, which shall apply and be granted by Entreprise des Postes et Télécommunications (“EPT”) to Other Alternative Operators (“Operator”) for the provisioning of EPT's Fibre Access services (“FA Services”).

All Schedules attached to this FAO form an integral part hereof and present the different FA Services and their respective applicable provisioning terms offered by EPT under this FAO.

The Co-Location services as from time to time referred to in this FAO are subject either to

- the applicable Reference Co-Location Offer (“RCO”) in case the Optical Distribution Frame (“ODF”) Site is located in an EPT technical building with dedicated Co-Location room (Area POP type B) respectively where Co-Location is granted in an outside shelter (Area POP type C), or ;
- to the applicable Area Pop Co-Location Offer (“APCO”) in case the ODF site is an Area-Pop type A) and shall be provided by EPT to the Operators in compliance with the specific terms and conditions of the said offers.

This FAO does not purport to diminish the rights of Operators to seek additional services, or EPT’s obligation to provide additional services under applicable law.

1.2 Services covered

The FA Services covered by this FAO is the access to the terminating segment of EPT’s point-to-point FTTH infrastructure. The terminating segment being the fibre link between the ODF and the Fibre Optic Network Termination Point (FO-NTP) at the customer’s premises. The FA Service can only be delivered if there is an EPT point-to-point FTTH Access network in place and if there is sufficient fibre capacity available in that Access network.

1.3 Minimal terms

This FAO defines the minimal terms and conditions which EPT will grant to other Operators. Nevertheless, EPT reserves the right to provide more beneficial terms and conditions, in accordance with the applicable legal framework, including the principle of non-discrimination.

1.4 No content liability

Neither the Operators nor the EPT shall be responsible for the content of calls or transactions passed through its own or an Operator's network. Laws and regulations regarding confidentiality and access by legal authorities to calls on the Operator's and EPT's network will apply.

1.5 Term

This FAO is valid unless:

- A new FAO is proposed by EPT, or
- A material change occurs in the laws or regulations governing electronic communications in Luxembourg.

1.6 Amendments

The content of this FAO may be timely reviewed and amended in order to comply with applicable rules and regulations.

1.7 Interpretation rules

Unless expressly defined otherwise hereafter (in particular in article 2 (Definitions) below), the terms used in this FAO shall be construed and interpreted in accordance with the laws or regulations, governing electronic communications in Luxembourg.

1.8 Prices

All prices mentioned in this FAO, including those specified in the Schedules attached hereto, are in EURO (€) and exclusive of Value-Added Tax (VAT) or any other legal taxes, which will be added where applicable.

2 Definitions

The terms used in this offer shall have the meaning as defined below or elsewhere in the relevant text. In the event of doubt, the description in the relevant text prevails to the definition given hereafter.

Defined Terms	Meaning
APCO	Area POP Co-Location Offer.
Area POP	<p>ODF site where the point-to-point FTTH fibre infrastructure is terminated. For the sake of clarity it should be noticed that existing CO sites can also serve as termination point for the point-to-point fibre infrastructure.</p> <p>Three different Area POP types are defined:</p> <p>Type A) A POP in EPT FTTH network from which access to EPT's point-to-point fibre optic local networks is granted. In general, an Area POP gives fibre access to customers in the proximity of this Area POP. The ODF, the Operator Racks and EPT's Racks are in the same room.</p> <p>Type B) An existing EPT technical building with a dedicated Co-Location room where an intermediate optical distribution frame (FO-VZ) is installed and from which access to EPT's point-to-point fibre optic local networks is granted. Operator racks are connected to the ODF via the FO-VZ by means of RCFs.</p> <p>Type C) An existing EPT technical building without a dedicated Co-Location Room (e.g. DLU, LV, etc) from which access to EPT's point-to-point fibre optic local networks is granted but offering not enough space to collocate the ODF, the Operator racks and EPT's Racks. In this case the Operator's racks will be installed as outside shelters in the near vicinity of the EPT technical building. The connection from Operator's racks to EPT's ODF will be assured by means of RCFs.</p>
Business Hours	From Monday to Friday, 08:00-12:00 and 13:00-17:00 CET, except on public, legal or usage holidays in Luxembourg.
CO	Central Office location.
Co-Location	The provision by EPT of physical space and technical facilities necessary to reasonably accommodate and connect the relevant equipment of an Operator, either in a CO or in an Area POP.
Co-Location Equipment Room	Physical space in EPT's site dedicated for Co-Location purposes in CO sites.
Co-Location Space	Specific physical space(s) reserved by EPT in a given Co-Location Equipment Room or in an Area-POP for a given Operator according to the needs expressly specified by the latter.
Commencement Date	Forecasting term for a date when e.g. a Service will start.
Confidential Information	Information that shall not be shared, in whole or in part, with third

	parties other than EPT and the relevant Operator, including in particular financial information, technical data, discoveries, know-how, techniques, designs, sketches, photographs, plans, drawings, blueprints, diagrams, specifications, marketing plans, studies, results, goals, sales figures, or other business information as well as any combination thereof.
Disclosing Party	The party in a FA Agreement handing over Confidential Information.
End-User	Any natural or legal person with whom EPT or Operator(s) has entered into an agreement for the provision of publicly available electronic communications services.
EPT	Entreprise des Postes et Télécommunications, an autonomous “ <i>Etablissement public</i> ” created by the “ <i>Loi du 10 août 1992 portant création de l’Entreprise des Postes et Télécommunications</i> ”.
EPT FCP	The Fault Contact Point provided by EPT to the relevant End-User and the Operator for addressing Fault Reports.
EPT Infrastructure	The civil infrastructure of EPT’s network used in relation to of for the purpose of electronic communications, including ducts, splicing chambers, manholes, street cabinets, Co-Location Equipment Rooms, etc.
EPT’s Website	EPT’s interconnect Web site at: http://www.pt.lu
ETS	European Telecommunication Standards.
FA	Fibre Access – Access to the fibre segment between the ODF and the FO-NTP of EPT’s point-to-point FTTH infrastructure.
FA Agreement	The agreement between EPT and the concerned Operator, including the schedules and – if relevant – amendments thereto, covering FA Services and which will be executed for the purpose of and in compliance with this FAO, which shall be an integral part thereof.
FAO	Fibre Access Offer.
FA Services	Fibre Access services.
Fault Report	Written report sent by Operator to EPT in case of faults discovered within the Fibre Access (FA) Service.
FCP	Fault Contact Point for directing fault report provided by either Party to the other.
FO-VZ	Intermediate optical distribution frame.
FO-NTP	The termination point of the fibre optic section at the relevant End-User’s premises at which point the EPT’s access network ends.
Forecast	The process of Operator’s forecasting future demands of FA services
FTTH	Fibre to the Home.
ILR - Institut Luxembourgeois de Régulation	The national regulatory authority in Luxembourg.

Incident Ticket	The written confirmation notice to be sent by EPT to Operator's FCP (i) upon opening of an incident ticket after receipt of a valid Fault Report communicated by the Operator to relevant EPT FCP and specifying EPT's reference number of the concerned incident ticket ("Incident Ticket Opening") and afterwards (ii) upon closing of the relating incident ticket, either after remedy of the concerned fault or after closure of the Fault Report for any other valid reason ("Incident Ticket Closing").
MDU	Multi Dwelling Unit (apartment blocks).
NTP	Network Termination Point - The termination point at the relevant End-User's premises at which point EPT's Access network ends.
ODF	Optical Distribution Frame.
ODF Site	Termination point of the fibre section at the relevant EPT site of the fibre optic point-to-point infrastructure, either in an Area POP or a CO.
OHDF	Optical Hand Over Frame – termination panels provided and installed by EPT in outside shelters (Type C Area POP) to terminate the RCF in the context of FA Services.
Operator	Any legal or natural person, to the exclusion of EPT, exploiting telecommunications networks and/or providing telecommunications services in Luxembourg.
Operator Access Point	The physical interface within the Operator's System at which the Interconnection Services can be obtained.
Operator FCP	The Fault Contact Point provided by the Operator for the relevant End-User and EPT.
Party	As the case may be, either EPT or the Operator with which a FA Agreement for the provisioning of FA Service by EPT is (being) concluded.
Parties	EPT and the Operator with which a FA Agreement is (being) concluded.
Provisioning Time	Time period needed for the survey and the time period needed for the delivery of a FA Service after a firm order.
RCF - Rack Connection Facility	Physical connection between EPT's ODF and Operator's rack. The physical RCF implementation depends on the Area POP type.
RCO - Reference Co-Location Offer	The applicable EPT's reference offer for Co-Location services in force.
Ready for Service Date	Date at which a given FA Service should be ready for commercial launch.
Receiving Party	The Party in an agreement receiving Confidential Information.
RFS	Ready for Service.
Schedule(s)	The schedule(s) attached to this FAO, as listed in its table of contents.
SLA- Service Level Agreement	The standard SLA offered by EPT for the FA Services under this FAO.

Short Term Forecast	Forecast covering next coming 1 – 6 months as of the date of its issuance.
Site	Physical building housing electronic communications equipment.
SPOC	The Single Point Of Contact provided by either Party to the other for the purpose and within the frame of the FA Agreement and related FA Services.
T(number)	Any timescales designated by “T” <i>plus</i> a number shall have the respective meaning as defined in Schedule 7.

3 The FAO Principles

3.1 Service Description

3.1.1 The FA Services shall:

- (i) be provided by EPT to an Operator in accordance with the terms and conditions of this FAO;
- (ii) consist of the following services:
 - Provisioning by EPT to an Operator of a FA to enable the Operator to provide electronic communications service(s) to End-Users, or
 - Transfer of an existing FA from one Operator or EPT to another Operator or EPT. The FA is only to be used for the delivery by the relevant Operator to End-Users of electronic communications services, which are compliant with the specifications as referred to in the relevant Schedules;
- (iii) only be provided in conjunction with the EPT's Co-Location Service for FA Services as defined in the applicable RCO and/or APCO.
- (iv) only be used for the delivery of electronic communications services delivered with equipment which is compliant with the specifications as described in 3.2.2.
- (v) only be used for the delivery by the relevant Operator to End-Users of electronic communications services, which are compliant with the specifications as referred to in the relevant Schedules.

3.1.2 The EPT FA Services shall only be provided on a line where:

- (i) A FO-NTP exists and is in service in the relevant End-User's premises, or where a FO-NTP doesn't exist but is technically possible and the physical address is located in a zone covered already by EPT's point-to-point FTTH infrastructure. In this case, the "demande de raccordement souterrain" may be transmitted to the EPT by the Operator, on behalf of the mutual client, following the terms of Schedule 8.
- (ii) The Operator has ordered the required RCFs in case the ODF site is an

Area POP type B) or type C), and

- (iii) as regards to the transfer of an existing FA from EPT or an Operator to an other Operator or EPT, the concerned End-User has prior requested that the contract(s) for the existing End-User service(s) in force at that time between the said End-User and the initial Operator or EPT to be terminated, all this in accordance with the respective applicable terms and conditions. For this purpose, the concerned End-User may empower in writing the concerned Operator or EPT for cancelling on the End-User's behalf all existing electronic communications services provided by the initial Operator or EPT to the End-User and carried by the existing FA to be transferred. It being specified that in such case the Operator will be responsible for evidencing upon first request its valid empowerment, if required by the initial Operator.

3.2 Responsibilities

3.2.1 EPT's responsibilities

EPT shall be responsible for:

- (i) EPT's point-to-point FTTH access network used to provide the FA Services,
- (ii) Connecting or disconnecting individual access lines in response to Operator confirmed orders submitted to EPT in accordance with Schedule 4 – Planning and Operation,
- (iii) Connecting or disconnecting RCFs in case of Area POP type B) or type C).
- (iv) Providing billing information, as specified hereafter in Article 3.10 (Financial Conditions),
- (v) Informing the Operator on system alteration to be made in the network and having a potential effect on the services offered by the Operator,

all these subject to the terms and conditions of this FAO.

EPT shall not be responsible for:

- (i) Expanding, modifying or conditioning in any way EPT's access network (or part of it) to provide FA Services. EPT shall in no case be obliged thereto, unless where a FO-NTP doesn't exist but is technically possible and the

physical address is located in a zone covered already by EPT's point-to-point FTTH infrastructure and has been ask for. In this case, the "demande de raccordement souterrain" may be transmitted to the EPT by the Operator, on behalf of the mutual client, following the terms of "Schedule 8 – How to transmit the "Demande de raccordement souterrain" to the EPT by the Operator, on behalf of the End-User" and only to the strict extent as specifically needed.

- (ii) The performance and follow-up of any service that the Operator operates on a line and provided as part of the FA Services, as long as EPT does not alter its network in such a way that could have a negative impact on the quality of service on a line and as guaranteed as part of the FA Services.

3.2.2 Operator Responsibilities

The Operator shall be responsible for:

- (i) Ordering or terminating, as the case may be, a line in accordance with Schedule 5 - Ordering and Provisioning Procedure.
- (ii) Using exclusively electronic communications terminal equipment compliant to "*Règlement grand-ducal du 4 février 2000 concernant les équipements hertziens et les équipements terminaux de télécommunications et la reconnaissance mutuelle de leur conformité*".
- (iii) Ensuring that all its staff and subcontractors intervening in relation to FA Services or this FAO have the relevant experience and be appropriately skilled and trained to properly and timely comply with the terms and conditions of this FAO.
- (iv) Conducting appropriate fault testing and producing associated Fault Reports to evidence faults in the EPT's network in accordance with Schedule 4 – Planning and Operation.
- (v) Informing the relevant End-User about all technical modifications required on his/her existing installation and the service impacts that might occur.
- (vi) Properly informing EPT for the purpose of and in relation to the FA Services and this FAO.
- (vii) Cooperate with EPT's reasonable requests for and/or in relation to the provisioning of the FA Services.

3.3 EPT's General Power

- 3.3.1 Occasionally, EPT, acting reasonably, may suspend services as described in this FAO for any of the following reasons:
- (i) if required by a national or international authority duly authorised and empowered to do so, or
 - (ii) for the purpose of repair, maintenance and/or improvement of any of EPT's electronic communications systems.
- 3.3.2 Wherever possible, EPT will give the Operator reasonable written notice before performing any of the actions related to the above and EPT will do its best efforts to restore FA Services as soon as possible after the concerned temporary suspension. EPT shall give on the Operator's reasonable request a technical report after any incident having had a major impact on the Operator's services. This shall enable the Operator to clearly understand the source of the issue.
- 3.3.3 EPT shall have the right to disconnect the compliant equipment or any part of it without prior reference or notice to the Operator if at such time, in EPT's reasonable opinion it is exposing or could expose any person to any danger of death or injury. EPT shall give a written technical report after any such incident. This shall enable the Operator to clearly understand the source of the issue.
- 3.3.4 Without prejudice to the foregoing clause, EPT shall have the right to request the Operator to disconnect any compliant equipment or any part of it within a reasonable time period, if, at such time, in EPT's reasonable opinion, it is causing, suspected of causing or could cause damage to the ODF Site or EPT's electronic communications apparatus or any other property or may cause damage to health of staff, if such exposure or damage is or may be imminent. EPT will immediately notify the Operator of the circumstances in which such compliant equipment has to be disconnected. If the Operator has not disconnected the concerned equipment within a reasonable time period, EPT shall have the right to disconnect itself the concerned equipment after prior notification thereof to the Operator.
- 3.3.5 EPT shall not be liable to the Operator for any loss, damage or injury arising due to EPT's action in disconnecting the compliant equipment or for any interruption to the electronic communications service carried out by the Operator using the

compliant equipment howsoever caused, except where the loss damage or injury is caused directly due to EPT's gross negligence.

- 3.3.6 In the event of a disconnection in accordance with the above, the Operator shall not reconnect the compliant equipment until the reasons for its disconnection have been fully remedied. In case the danger or threat referred to above is caused directly due to EPT's gross negligence, then EPT shall reimburse to the Operator the evidenced reasonable direct costs of reconnecting the compliant equipment.

3.4 Quality of Service – Service Level Agreement (SLA)

EPT will provide the FA Services in case of a transfer of an existing FA, or in case of a new FA provided that a spare fibre is available between the FO-NTP at the End-User's building and the Operator's presence at the ODF Site in accordance with this FAO.

Within the frame of this FAO, EPT offers the following service level parameters for the FA Services. These parameters match in all cases the service level granted by EPT to its retail End-Users for similar services, except otherwise agreed between parties.

It is specified, among other things, that:

(1) The Provisioning Time of an FA Services by EPT is within twenty (20) business days, where it concerns a building with an existing FO-NTP, except where the required provisioning works are of such importance that they need substantial works to be carried out (e.g. civil works). In the latter case, EPT will inform the Operator about the substantial works to be carried out and the foreseen Provisioning Time.

For the sake of clarity and avoiding misunderstandings, the Provisioning Time includes the time period needed for the survey and the time period needed for the delivery of service after a firm order. This means that the Provisioning Time begins at the moment when the Operator submits a survey request and ends when the FA service is delivered (i.e provided). The order process is completed after confirmation by EPT to the Operator provided that EPT has issued a positive reply to the survey and that the Operator has done an effective order. Therefore, the period of time existing between the positive reply of EPT and the effective order of provisioning by the Operator, is not included in the term Provisioning Time. If the Operator has not taken the first available appointment date in the booking manager system, the period between the first available appointment and the effective appointment taken by the Operator will not be considered as Provisioning Time.

The Provisioning Time shall be handled through the appointment handling procedure as referred to in this FAO, but the Provisioning Time as listed here above is also to be followed, and EPT has to foresee the possibilities of appointments through the appointment handling procedure in accordance to this Provisioning Time.

For the above mentioned periods:

- (a) the specified time period shall automatically stop in case the concerned provisioning requires an appointment with the End-User, while for reasons beyond

EPT's control (e.g. End-User's absence or unavailability) such appointment could not be fixed in due time with the End-User.

If EPT's staff, for reasons beyond EPT's control (e.g. End-User's absence or unavailability), could not intervene in due time despite the appointment fixed with the End-User, the Operator shall be informed regarding the "stop" of the specified time.

(b) the specified time period shall only restart as of the time at which the event(s) specified in point (a) has/have been duly remedied and EPT's staff could duly and timely intervene to perform provisioning of the FA Services. The "restart" of the specified time begins with a new appointment fixed in the online booking manager by EPT to the Operator, and is only effective after this reporting.

(2) Unless otherwise agreed, EPT will re-establish FA Services within five (5) business days maximum following the day at which a Fault Report has been validly submitted, except where the required clearance works are of such importance that they need substantial works to be carried out (e.g. civil works). In this case, EPT shall inform the Operator about the situation within a time frame of five (5) business days maximum following the day at which a Fault Report has been validly submitted. If during the repair works it occurs that the initially expected time for restoration cannot reasonably be maintained, EPT shall inform the Operator immediately hereof and specify the reasons thereof.

For the above mentioned periods:

(a) the specified time period shall stop in case the concerned fault clearance requires an appointment with the End-User, while for reasons beyond EPT's control (e.g. End-User's absence or unavailability) such appointment could not be fixed in due time with the End-User or if EPT's staff could not intervene in due time despite the appointment fixed with the End-User. The "stop" of the specified time shall be reported by EPT to the Operator, and is only effective after this reporting.

(b) the specified time period shall only restart as of the time at which the event(s) specified in point (a) above has/have been duly remedied and EPT's staff could duly and timely intervene to clear the concerned fault. The "restart" of the specified time begins with a new appointment fixed in the online booking manager by EPT to the Operator, and is only effective after this reporting.

(3) If EPT fails to provision or to re-establish one or several FA Service(s) within the above mentioned time period while either the installation time, or the concerned fault clearance and/or the restoration delay are within EPT's sole responsibility, the Operator shall be granted upon written request with a financial indemnity equivalent to a one (1) month fixed fee of the concerned FA Service(s).

The above indemnity shall not apply in case:

(a) of a Force Majeure event (where the reasonable proof of these event has to be given by EPT); or

(b) the Operator claims for the above-mentioned financial indemnity later than sixty (60) calendar days as from the day after which the warranted provisioning or restoration time elapsed; or

(c) (in the case of provisioning failing only) of the requests which are significantly (by 10 %,) in excess of the number of monthly by EPT realized requests of the Operator calculated from an average of the three (3) previous months; or

(d) EPT has been prevented in whole or in part to intervene in due time to comply with the warranted provisioning or restoration time, notably due to the Operator's and/or the concerned End-Users act or omission (where the reasonable proof of such prevention has to be given by EPT).

(4) Fault clearance outside Business Hours or with priority handling is possible for exceptional cases, provided the Operator has prior accepted, for each relevant exceptional case, the respective fees set out in point 6.4 of Schedule 6 - Tariffs attached to this FAO. In such case, the terms and conditions of the Standard SLA shall not apply, while, according to the event concerned, the Parties will agree upon a reasonable time schedule applicable to such provisioning or fault clearance. The procedure to provide as well as EPT's contact point information is described in Schedule 4 – Planning and Operation.

3.5 System protection

Each Party is responsible for the safe operation of its respective system and shall

take all reasonable and necessary steps and measures in its operation, implementation and maintenance to ensure that its system does not:

- (i) Endanger the safety or health of employees, contractors, agents or End-Users of the other Party.
- (ii) Damage, interfere with or cause any deterioration in the operation of the other Party's system or a third party operator's system.

3.6 Configuration and technical constraints

Access lines will be provided in accordance with the technical constraints specified in Schedule 3 - Technical specifications of EPT's point-to-point FTTH infrastructure. EPT shall not be liable for a shortage of access lines. EPT shall remedy shortage issues for Operators in the same way it does for its own customers. If an Operator has sound reasons to believe that it has not been treated in the same way as EPT's End-Users or other Operators, the Operator can require EPT to give further explanations in this respect. EPT shall reply in writing to the Operator within maximum ten (10) working days after the day of request by the Operator.

3.7 Scheduled System Alteration

3.7.1 Scheduled system alteration with major impact

When EPT wants to make a system alteration which may reasonably have a major impact on the proper provision of the FA Services under this FAO to one or several Operator(s), EPT shall notify the Operator as soon as the alteration is planned internally but in no case shall the notification be less than three (3) months before the start of the said alterations, which shall specify the technical details of the contemplated system alteration and the foreseen date of the said anticipated system alteration. With such a notification, EPT shall always provide the Operator with the complete information including, to the extent reasonably practicable, the potential impact thereof on the service(s) provided by the Operator to the End-Users. The three (3) months notice is considered as a minimum delay. If the Operator provides objective, valid, written and reasonable arguments that the proposed changes involve major technical alterations on the Operator's side, the Operator can request EPT within five (5) working days after

the day of EPT's notification to adapt the notice period in a way to reasonably allow the Operator to integrate the changes without severely affecting its service or quality. EPT will agree with the proposed period, unless it has objective, valid, written and reasonable arguments to decline the Operator's request. In the latter case, EPT will propose an alternative date to implement the scheduled system alteration.

3.7.2 Scheduled system alteration without major impact

When EPT wants to make a system alteration which may reasonably not have a major impact on the proper provision of the FA Services under this FAO to one or several Operator(s), it shall give to the concerned Operator(s) a prior notice having regards to the circumstances which shall in no case be less than five (5) business days prior to the foreseen date of the said anticipated system alteration. Such notification shall specify the technical details of the contemplated system alteration, the foreseen date of the related works and the reasonably foreseeable impact of the said works on the FA Services provisioning.

3.8 **Works or intervention due to a network failure or an emergency case**

In case EPT has to intervene on its network further to a network failure or an emergency case, EPT will do its best efforts to limit the time of its intervention having a possible impact on the provisioning of the FA Services to the reasonable minimum time having regards to the circumstances. In any case, EPT will inform the Operators of such an intervention as soon as reasonably possible, while the restoration of the service provisioning on the network shall be the priority.

The Operator will be treated in the same way as EPT's End Users and other Operators.

3.9 **Coordination between the Parties**

3.9.1 EPT puts into place an entity in order to manage the provisioning of FA Services in EPT's point-to-point FTTH infrastructure. This entity shall be the single point of contact for the Operator handling questions regarding the operational

- management of providing access to the fibres of EPT's point-to-point FTTH network. This entity shall be accessible during Business Hours.
- 3.9.2 The Operator undertakes to contact only the EPT single point of contact as specified here above and to provide its own single point of contact for the management of FA Services, including for questions regarding operational subjects.
- 3.9.3 The EPT's and concerned Operator's respective entity being the single points of contact in relation to this FAO and to the provision of the FA Service shall be specified in the concerned FA Agreement.

3.10 Financial conditions

3.10.1 Applicable tariffs and billing modalities

In compensation for FA Services provided by EPT under this FAO, the Operator shall pay the tariffs specified in Schedule 6 – Tariffs. Billing procedures are or, as the case may be, will be described in the FA Agreement between the concerned Operator and EPT.

3.10.2 Bank guarantee

The Operator shall, at EPT's request, provide for an irrevocable and unconditional bank guarantee on first demand issued in EPT's favour by a first rank EU financial institution for an amount of 50.000,- €. The guarantee shall be issued for a period at least equivalent to the duration of this FAO.

3.10.3 Reasonable doubts on an Operator's creditworthiness

When, and as long as serious and ascertained doubts exist regarding the creditworthiness or solvency an Operator's, EPT may without prejudice to previous arrangements require payment in advance.

3.11 Relations with end-Users and branding

3.11.1 End-Users

Without prejudice to the applicable legal and regulatory framework, EPT will not undertake customer handling/care of the Operator's End-Users.

3.11.2 Branding

The Parties agree not to offer any service under any brand, including any trademark, trade name or company name of the other Party unless the use of the brand(s) of the other Party is expressly agreed upon in writing between the Parties. Such use of the brand will then be strictly limited to the service at stake.

EPT is allowed to use, for all interventions in the context of this FAO, its normal vehicles and staff uniforms with all advertising on them as for its own products and services.

Neither the Operator nor EPT is allowed to attach any branding or advertising signs on each other's equipment and infrastructure, neither in the sites nor in the End-User's site.

4 Property rights

All relevant EPT Infrastructure used for the provisioning of FA Services to the Operator remains and shall remain the integral property of EPT.

With the cessation of FA Services by the Operator, whatever the reason, any usage rights of the Operator on that relevant EPT Infrastructure will automatically expire on the effective cessation date of the FA Services.

If an End-User terminates the telecommunication service(s) provided by the Operator by means of the FAO, the Operator shall submit a hand back order in a time frame of maximum one (1) month according to the procedure defined in Schedule 5 - Ordering and Provisioning Procedure, so that the FA may then be marked as available for re-use by any other Operator including EPT.

5 General terms and conditions

5.1 Confidentiality

- 5.1.1 A Receiving Party shall keep in the strictest confidence all Confidential Information, whichever may be the way or support of its transmission (e.g. in writing, via e-mail or orally) and will not disclose such information to any third party unless the Disclosing Party expressly prior agrees in writing to the release or disclosure of that specific Confidential Information to the said third party. A Receiving Party shall exercise at least the same security level and degree of care than that Party applies to protect its own Confidential Information of an equivalent nature, and in no case less than reasonable care.
- 5.1.2 Confidential Information shall be used by the Receiving Party solely for the purposes for which it was disclosed.
- 5.1.3 The Operator has to inform the End-User that his/her personal data is being transferred to EPT, as specified and/or required by the national data protection legislation.

5.2 Force Majeure

- 5.2.1 Neither Party shall be liable for any breach of a FA Agreement or delay in the implementation of any of its obligations under a FA Agreement caused by a Force Majeure event, i.e. an unforeseeable and irresistible event beyond the Parties' reasonable control and which prevents the performance by the affected Party of its obligations under the FA Agreement and/or this FAO.
- 5.2.2 For the sake of clarity, the following events shall be construed as being a Force Majeure event, without this list being exhaustive: irresistible and unforeseeable natural phenomena (such as floods, hurricane, lightning,...), war(s), invasion(s), revolution(s), riot(s), governmental act(s), general strike(s) or similar event(s), epidemic(s), major machinery and/or equipment breach, civil works and/or third party's (parties') intervention damaging in whole or in part EPT's network and/or equipment and impacting and/or interrupting any part of the FA Services and/or related provisioning.
- 5.2.3 The Party affected by a Force Majeure event shall promptly notify the other upon

- occurrence thereof of the estimated extent and duration of such inability to perform its obligations and do its reasonable efforts to mitigate the detrimental consequences of the said Force Majeure event.
- 5.2.4 As soon as reasonably practicable after cessation of the said Force Majeure event, the concerned Party shall notify the other thereof and deliveries under and/or performance of a FA Agreement shall be resumed without undue delay.
- 5.2.5 If, as a result of a Force Majeure event, the performance by either Party of its obligations under a FA Agreement is only partially affected, such Party shall nevertheless remain liable for the performance of those obligations not affected by the said Force Majeure event.
- 5.2.6 To the extent that a Party is prevented, as a result of Force Majeure event, from providing all or part of the services or facilities to be provided under a FA Agreement, the other Party shall be released to the equivalent extent from its obligations to make payment for such services or facilities.

5.3 Limitation of Liability

- 5.3.1 Neither Party undertakes any liability for the acts or omissions of a third party provider of telecommunications services.
- 5.3.2 Neither Party excludes or restricts its liability for death or personal injury caused by its own negligence or liability.
- 5.3.3 Neither Party will be liable to the other for any claims, proceedings or actions brought or made against that Party by an End-User of services provided by that Party.
- 5.3.4 Neither Party shall be liable to the other in contract, tort (including gross negligence or breach of statutory duty) or otherwise for indirect or consequential damage or any other losses of profit whatsoever arising in connection with the execution and/or implementation of a FA Agreement, howsoever caused.

6 Procedure for reaching a FA Agreement

FA Agreements will be negotiated and entered into, based on the standard terms and conditions, pursuant to and in compliance with the applicable legislation.

These standard terms and conditions will be made available after signature of a non-disclosure agreement.

Requests for entering into a FA Agreement with EPT under this FAO must be made in writing and per registered mail to the following address:

Entreprise des Postes et Télécommunications

Direction Générale

L-2020 Luxembourg

Tel: +352 47 65 1

Fax: +352 47 51 10

7 Schedules 1 to 8

Schedule 1 - Service Description – Fibre Access (FA)

1.1 General description

The Fibre Access (FA) means a single monomode fibre between EPT's Optical Distribution Frame (ODF) at EPT's Area POP and the Fibre Optical Network Termination Point (FO-NTP), at which point the EPT's access network ends. At EPT's Area POP, optical fibres are terminated at the ODFs. The Operator's access from Operator's rack to the optical fibres will be established by means of a direct fibre patch between the ODF and the Operator's Rack (Area POP type A)) or by means of a fibre connection between the ODF and the Operator's rack through a RCF (Area POP type B) and C)) as described in Schedule 2.

The Operator shall gain access to an end-to-end optical fibre in the EPT's point-to-point FTTH access network. It is further required that the optical circuit is existing and can be provided without new construction of physical optical cables or splicing in the network.

The construction of new optical circuits is outside the scope of this FAO but a new FO-NTP can be asked by the Operator (on behalf of the end-user) and shall be provided by EPT, under this FAO, if technically feasible and if the physical address is located in a zone already covered by EPT's point-to-point FTTH infrastructure (see 3.1.2).

1.2 Network Termination Points

1.2.1 The FA Service covers a single monomode fibre circuit, starting from the ODF at the Area POP and terminating on the FO-NTP at End-User's site.

1.2.2 The FO-NTP type depends on the End-User's site:

In Multi-End-Users' apartment buildings, the FO-NTP is the cross-connectable distribution box in the building where the fibre optic outdoor cable ends.

In one-family houses, the FO-NTP is the first distribution box inside the End-User's house where the fibre optic outdoor cable ends.

1.2.3 The End-User has full responsibility for installation, repair and necessary extensions of the in-house cabling system to the different telephone plugs. Therefore the in-house cabling is private propriety. If EPT has, in multi-end-users buildings, installed and connected on its behalf the different apartments to the FO-NTP with fibre in-house cables, the Operator shall pay per fibre a monthly rental charge to use this in-house cabling. This does not cover modifications, extensions and repairs. This same monthly rental is also applicable to EPT in case it uses a fibre on an in-house cabling that has been installed by the Operator at its own costs.

It has to be stressed that EPT's responsibility ends at the FO-NTP. No action or measurements will be done by EPT on the in-house cabling neither in case of the installation of a new line nor in case of faults clearance.

1.3 Boundary Conditions and Prerequisites

- 1.3.1 Co-Location is a prerequisite for the implementation of these FA Services. Provisioning and maintenance of Co-Location Services will be offered by EPT to the Operator as specified in the applicable RCO and/or APCO.
- 1.3.2 In case of Area POPs of type B) and C), the existence of spare capacity in RCF is a prerequisite for the implementation of FA Services.
- 1.3.3 The Operator undertakes to receive from the End-User a signed request for each telecommunications service to be provided on a FA prior to order a FA Services.

In case of inconsistency, doubt, audit complaint or dispute with the End-User, EPT may ask to receive a copy of the above-mentioned request, while the Operator shall keep and archive the said request for the minimum time period specified by applicable Luxembourg laws.

- 1.3.4 EPT shall not support customer handling/care services for the Operator's End-Users. Requests from Operator's End-Users due to inadequate handling of those requests by the said Operator shall be dismissed by EPT, unless otherwise expressly agreed between the Parties.

1.4 Provisioning and Cessation

“Schedule 2 - Service Description – Operator Rack Connection_” describes the procedures applicable to the connection of Operator’s rack to the ODF. The “Schedule 5 - Ordering and Provisioning Procedure” describes the procedures applicable to FA provisioning and FA cessation.

Schedule 2 - Service Description – Operator Rack Connection

The Operator Rack Connection physically represents the connection from Operator rack to ODF to grant Operator access to the terminating segment of EPT's point-to-point FTTH infrastructure.

2.1 Principles

In case the ODF is located in an Area POP type A, the Operator rack connection (connection between the ODF and Operator's rack) is done after EPT receives an order for a FA Services. This means that the Operator rack connection is not a prerequisite opposite to the case of Area POPs of type B) and C) which are described in 2.2 and 2.3.

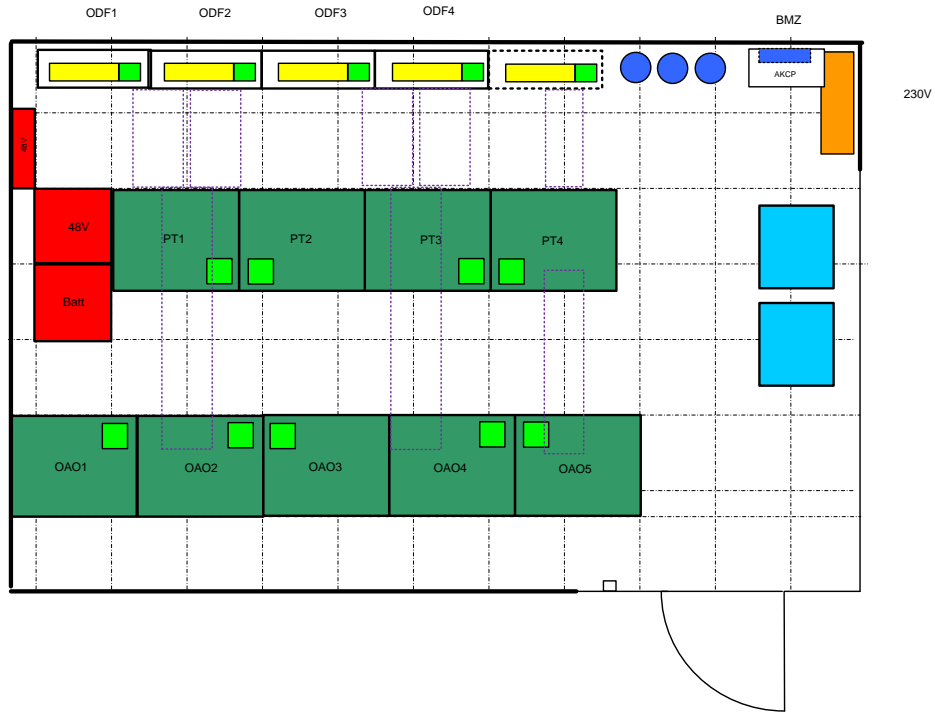
2.2 Area POP type A) specificities

As specified before, no dedicated RCF is required in case of Area POP type A). The Operator Rack connection is the direct fibre optic patch between the ODF and the Operator Rack implemented during the FA Services provisioning. The patch is provided by EPT and has the following characteristics:

Both ends will be terminated with an SC-APC 9° connector to be connected to the ODF and on the other end to be connected to the Operator's rack. The connector type may be changed by EPT with future technologies.

The fibre patch will be installed by EPT and connected to the ODF. On the operator side the end of the patch will be available near the Operator Rack with sufficient length to allow the Operator to connect the patch to his equipment. The marking on the patch cord shall be done by EPT on site and shall contain the ODF number and the FA service number.

Figure: Example of a typical configuration of an Area POP type A)



Note: Configuration might be different for some POPs

2.3 Operator Rack Connection in Area POPs of type B)

In case the ODF is located in an Area POP of type B) (CO with dedicated Co-location Room) the Operator rack connection (connection between the ODF and Operator's rack) is done by means of a RCF. This RCF is a prerequisite for the implementation of FA Services. The RCF consists of 2 parts: (i) an optical cable between ODF and FO-VZ in the Co-Location room to be provided and installed by EPT and (ii) a break-out cable of 24 fibres between the FO-VZ in the Co-Location room and Operator's racks to be provided, installed and connected to Operator's rack by the Operator.

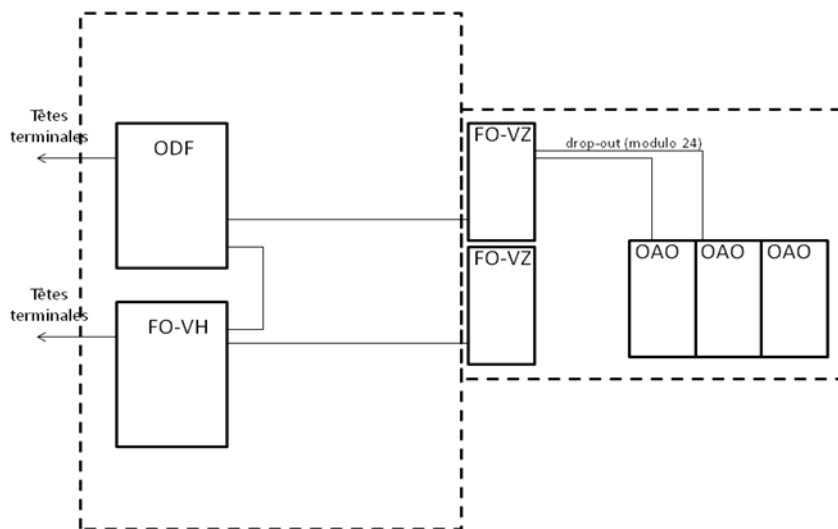
The RCF will be documented in EPT's cable management database and when Operator requests a new FA Service he will receive the information which fibre of his RCFs has to be used. If, at a certain point in time, no more free fibres are available in the RCFs, the specific orders for FA will be rejected. In this case, the Operator gets the information that a new RCF needs to be ordered by the Operator. The RCFs have to be installed prior to the request of FA Services terminated at the ODF of this site.

ODF – FO-VZ part of RCF

EPT will handle the cabling between ODF and FO-VZ in Co-Location room. EPT ensures that upon order of an RCF the necessary fibre connections between ODFs and the FO-VZ are installed.

FO-VZ - Operator rack part of RCF

The Operator provides and installs the break-out cable in a way that one end is close to the FO-VZ installed in the Co-Location Room. The end of the break-out cable close to the FO-VZ shall have SC-APC 9° connectors and each one of the 24 dropped-out single cable elements on this side must have a length of 2,6m. In a second step, EPT will physically connect the break-out cable to the FO-VZ. The Operator is responsible to physically connect the other side of the break-out cable to equipments installed in his rack.



2.4 Operator Rack Connection in Area POPs of type C)

In case the ODF is located in an Area POP of type C) the Operator rack connection (connection between the ODF and Operator's Racks installed in outside shelters in the near vicinity of the EPT technical building) is done by means of a RCF, consisting of an optical cable between the ODF and the outside shelter. EPT provides and installs this optical cable. The termination panel in ODF and the OHDF in Operator's outside shelter form an integral part of this RCF. EPT connects both ends of RCF to ODF and OHDF.

RCFs will be documented in EPT's cable management database and have to be ordered upon EPT and installed by EPT prior to the request of FA terminated at this site.

The patch between OHDF and the Operator's equipment in the outside shelter is the sole responsibility of the Operator.

2.5 Boundary conditions and prerequisites

Co-Location in an Area POP is a prerequisite for the implementation of Operator Rack connections. As long as an Operator does not have approved Co-Location facilities, no order for Operator Rack connections can be accepted.

EPT shall be responsible for the maintenance of the cable and termination panels in the ODF. The handover point shall be the Operator rack side end of the optical patch in case of type A) Area POPs or a given fibre on Operator rack side of the break-out cable in case of type B) Area POPs or a given port on the OHDF in Operator's rack in an outdoor shelter in case of type C) Area POPs.

The Operator shall be solely responsible for any loss, theft, destruction of, or damage to EPT's equipment in the accommodation housing the RCF at the accommodation provided by the Operator, howsoever caused, occurring at any time while such EPT's equipment is so located.

In case of normal provisioning, EPT does not need to intervene in the Operator's rack. Therefore, the Operator is entitled to lock access to his rack.

In case of problems arising on the RCF, EPT may request the Operator to enable temporary access to a locked rack where the RCF is terminated at no expense for EPT.

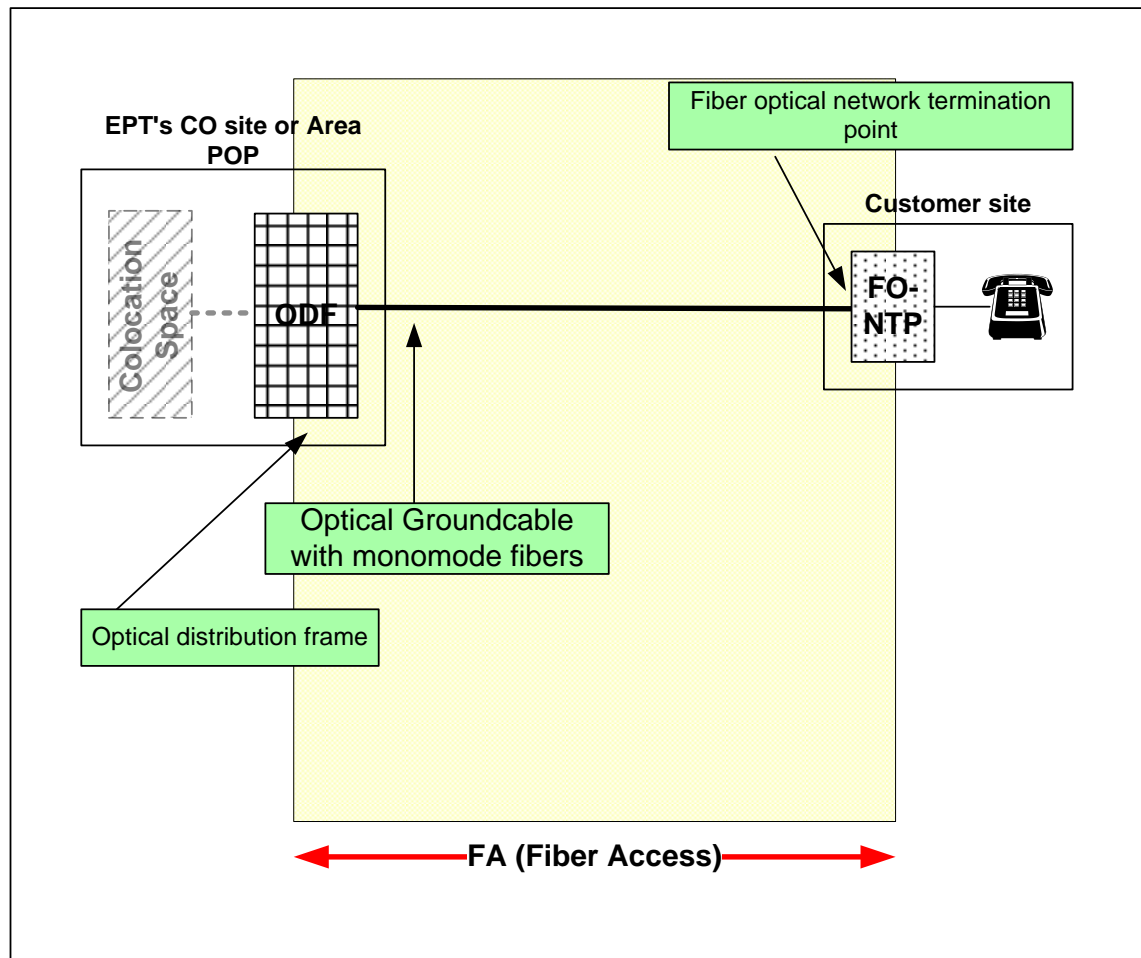
2.6 Provisioning

The procedure for Operator Rack Connection provisioning is described in Schedule 5 - Ordering and Provisioning Procedure.

Schedule 3 - Technical specifications of EPT's point-to-point FTTH infrastructure

3.1 Network characteristics

3.1.1 Generalities



3.1.2 Fibre Cable Properties

The optical fibres used are monomode fibres 9/125 μm according to ITU-T G.652D or G.657A. The maximum attenuation is 0,34 dB/km at 1310nm and 0,21 dB/km at 1550nm. The fibres are terminated at the ODF and at the FO-NTP with tuned SC-APC 9° connectors.

Schedule 4 - Planning and Operation

4.1 Preliminary exchange of information

EPT will provide to the Operator, as soon as reasonably practicable, but not later than T51 (defined in Schedule 7 – Parameters) from the date of signature of the non disclosure agreement for the FA Services, an internet access address and password to enable him to view:

- The location of ODF Sites and,
- To find for each postal address the fibre possibilities and the correspondent ODF Site.

The data is provided for the sole purpose of enabling the Operator to consider whether to request services from EPT pursuant to this offer.

4.2 Electronic Information exchange

The exchange of information shall be exclusively done by means of electronic messaging transfer of XML files via Web service in SOAP (Simple Object Access Protocol) format.

To be accepted, the structure of the files transmitted shall comply with EPT's specifications and reasonable instructions. For this purpose, a complete documentation describing the Web service / SOAP interface and the procedures for message exchange between an Operator and EPT in relation to FA Services will be published and timely updated as appropriate on EPT's interconnect site.

Before the first data transmission can take place, the Operator has to perform transmission tests with EPT. A period of maximum T52 is foreseen between the Operator's declaration of its interest in FA Services and the first file to be accepted.

4.3 Forecasting

Providing new FA Service to Operators is a very labour intensive activity. The volume of activity depends mainly of the commercial activity of the different Operators without any direct influence of EPT. To allow proper planning of EPT's production capacity and of its work force allocation as well as to respond to the demand within the indicated time limits and to avoid bottlenecks, an accurate forecasting from the historical data of the systems used by EPT and in some cases from concerned Operators of the required provisioning is essential.

4.3.1 To dimension its work staff, EPT will use a rolling forecast based on the orders received via the online booking manager system during the last three (3) months period. No committed forecasts have to be provided by the Operator or EPT retail. EPT will respect the installation time as specified in chapter 3.4 if the deviation of the before mentioned rolling forecast in less than 10%.

4.3.2 In case an Operator foresees a substantial increase of FA orders, EPT will do

every possible effort to respect the installation time as specified in chapter 3.4.2 by increasing the necessary workforce as far as the Operator informs EPT by electronic mail hereof at least three (3) months in advance.

- 4.3.3 During the first six (6) months after an Operator has signed the FA agreement it will not be possible to use rolling forecasts. During this phase EPT will accept up to 20 FA orders per month per Operator.

In case an Operator foresees a higher number of FA orders during this initial phase, EPT will do every possible effort to respect the installation time as specified in chapter 3.4 by increasing the necessary workforce as far as the Operator provides forecasts hereof by mail to EPT at least two (2) months in advance. If, in this case the order volume is lower than 80% of the Operator's Forecast, EPT will charge the Operator for the not ordered services below 80% of the Forecast half the installation charge as defined in Schedule 6 – Tariffs.

4.4 Fault Reporting and Repair

4.4.1 Generalities

Prior to submit a Fault Report, the Operator shall have to ensure that a genuine fault exists and that every effort has been made in advance to check that the fault resides within EPT's area of responsibility.

4.4.1.1 EPT FCP and Operator FCP

The Operator shall send a Fault Report to EPT FCP at the following email address:

BO_ACC_DER@ept.lu.

Upon receipt of a valid Fault Report compliant to the minimum terms set forth in point 4.4.2.1 below, as applicable, EPT shall send an e-mail to the Operator to inform it first of the Incident Ticket opening and last of the Incident Ticket closing.

To do so, the Operator shall provide EPT with an e-mail address for the exchange of such notification messages.

All related phone calls should be directed via the EPT FCP: +352 4991 5868.

Operator's Fault Reports may be addressed to EPT 24/7.

To be valid, a Fault Report shall contain the minimum information and data requested in the below paragraphs according to the FA Services concerned.

4.4.1.2 Fault clearance interventions

Fault clearance will be performed during Business Hours.

Special conditions and tariffs apply for fault clearance outside Business Hours.

Fault clearance interventions are billed by EPT to the Operator as defined in Schedule 6 – Tariffs.

Fault reporting and repair have to be performed and achieved in compliance with the specific terms, conditions and time schedules specified per type of service in the related paragraphs below.

Upon receipt of a valid Fault Report, EPT will confirm the due receipt thereof and the starting of EPT's fault clearance intervention in relation thereto by sending an Incident Ticket opening to the Operator.

For the avoidance of doubt:

- (i) only Fault Reports confirmed by an Incident Ticket opening will be treated; and
- (ii) the time computation relating to EPT's SLA shall start to count as of the date and time of the Incident Ticket opening and end at the date and time of the related Incident Ticket closing as specified in detail in chapter 3.4 (Quality of Service – Service Legal Agreement (SLA)).

4.4.1.3 Wrongful repair request

A wrongful Fault Report occurs when EPT has done all necessary measurements on the line and test results prove that the quality of the service concerned by the Fault Report is not the cause of service interruption or service degradation.

In case the reported fault does not lie within the scope of EPT's responsibility for the concerned part(s) of the FA Services under this FAO or in case of a wrongful Fault Report, all the costs related to works and travelling already performed by EPT in relation to such Fault Report will be charged to the Operator.

4.4.2 Fault reporting and repair for FA

4.4.2.1 Fault reporting to EPT by the Operator

Fault Reports affecting the FA Service will be exchanged between the Operator FCP and the EPT FCP.

The Operator shall provide sufficient information with each Fault Report to allow the diagnosis of the reported fault and to enable the progression of the fault until resolution. Therefore, all Fault Reports should be done using a predefined fault report form that can be downloaded from EPT's Website "www.pt.lu", and fulfil all items referred to in the said form.

Fault Reports are nevertheless also accepted via simple e-mail containing at least the following data:

1. EPT's reference number of the disturbed FA Services;
2. Contact point and phone number of the concerned End-User;
3. Full address of the concerned End-User;

4. Operator's contact point (including phone and fax numbers as well as e-mail address) for the given Fault Report and related fault clearance;
5. Precise description of the reported fault;
6. Date and description of the intervention of the Operator's technician, including the result of an attenuation measurement between Operator's connection point in the Area POP and the FO-NTP.

The Operator may pass any additional information it considers relevant to the Fault Report while EPT shall not be obliged to use such additional information, whichever may be the reason.

Upon receipt of a valid Fault Report, EPT will send an Incident Ticket opening to the Operator as well as afterwards the Incident Ticket closing. This automatically sent notification messages are triggered by the EPT's reference number of the line. If this field is not indicated in the Operator's Fault Report, no Incident Ticket will be sent to the Operator, while the concerned Fault Report will be deemed as invalid.

4.4.2.2 Fault reporting to EPT by the End-User

The Operator has to inform the End-User about the Operator's responsibility and timely communicate the Operator's FCP to the End-User in order to prevent any abuse of EPT's support services.

EPT will not accept any Fault Report from the Operator's End-Users. EPT has no obligation to report to the Operator a fault that an End-User would have directly reported to EPT.

4.4.2.3 EPT and Operator liabilities for the fault clearance

To complete fault clearance, EPT is authorized to disconnect temporarily the FA service. This interruption will be strictly limited to the time required to clear the fault.

Any Operator's refusal to timely comply with such request will prevent EPT from verifying the concerned FA Services and the related Fault Report will be deemed as being wrongful. Both parties shall co-operate in good faith to find suitable timings.

If the Operator's Fault Report received by EPT is valid and contains all minimum information requested, EPT will issue an Incident Ticket opening and starts fault localization and fault clearance process during normal working hours. Upon detection of a fault on the FA Service, EPT will use all reasonable endeavours to repair the fault as soon as reasonably practicable.

As specified in Chapter 3.4 of this FAO, the fault clearance is to be achieved within T40. The applicable tariffs are specified Schedule 6 – Tariffs.

The Operator shall cooperate with EPT's reasonable requests in an effort to locate and if possible resolve any fault. EPT reserves the right to contact and make an appointment with the Operator's End-User for repair of the FA Service.

In case where contact with the End-User is necessary for repair and the Operator failed to give this information, the related Fault Report will be rejected and be deemed as wrongful.

When EPT has sufficient technical proof that the fault has been cleared an Incident Ticket Closing will be sent to the Operator. The Operator may challenge the closing of ticket within four (4) working hours. EPT may give the ticket a different status within its systems. Except if the Operator rejects the concerned Incident Ticket Closing within four (4) working hours after receipt, the Incident Ticket and the related Fault Report will be closed automatically by EPT.

Any closing ticket of EPT will contain detailed information on the fault and the resolution.

If the Operator rejects the Incident Ticket Closing as specified above, it shall specifically provide the following information:

- The reason why the Operator reasonably believes that the circuit is unsuitable for use as a FA Service,
- Whether or not the Operator believes that the FA Service is within the agreed specifications,
- All additional information that the Operator reasonably considers suitable to assist in understanding and diagnosing any underlying fault in the FA Service.

The Operator must cooperate with EPT to carry out further tests, even on Operator's equipment when reasonably requested to do so. EPT may carry out additional works upon the Operator's request and approval, while the costs thereof shall be invoiced to the Operator, only in case of a wrongful repair request.

Both Parties recognize and acknowledge that the fault repair time will commence when EPT issues the Incident Ticket opening and will end when the Incident Ticket closing is not rejected by the Operator.

4.4.2.4 End-Users' liabilities

The Operator shall insure that the concerned End-User(s) will timely grant EPT's field-force access to the FO-NTP within his/her premises as often as this is necessary for the clearance of the concerned fault. In case of any problems, EPT will report this to the Operator, who will have to contact forthwith the End-User and take the necessary arrangements to grant access to EPT.

In case the End-User is absent during EPT's workforce visit, EPT will drop a card in the mailbox requesting the End-User to contact EPT's helpdesk to convene an appointment. In such case, the normal intervention periods cannot be respected and the intervention time computation shall be automatically suspended until the End-User contacts EPT's helpdesk and an arrangement has been achieved for a new visit.

Schedule 5 - Ordering and Provisioning Procedure

5.1 Provisioning of Operator Rack connections

5.1.1 General

Each order for an RCF to be passed by the Operator for a given Area POP shall be done according these rules:

- Forecasts and ordering shall be done by the Operator per CO.
- All Forecasts and firm orders shall be submitted by registered mail to the EPT's SPOC for FA Services.
- Irrespective of the terms and conditions stated below, EPT reserves the right to reject any Forecasts for a given Local Exchange in case the volumes requested by the Operator for the concerned Local Exchange in the said Forecasts are not in line with reasonable market demands.
- Subject to priory agreed forecasts, EPT shall make reasonable endeavours to provide the ordered internal tie cables within T30 to the Operator.

5.1.1.1 Specificities for Area POPs of type A)

As described in Schedule 2 - Service Description – Operator Rack Connection, 2.2 Area POP type A) specificities, the Operator doesn't need to order a specific Operator Rack Connection in type A) Area POPs prior to ordering a FA Service.

5.1.1.2 Operator Rack Connection in Area POPs of type B)

In case of type B) Area POPs, the Operator has to order and install RCF, (in this case the RCF consists of a break-out cable; cf. Schedule 2 - Service Description – Operator Rack Connection, 2.3 Operator Rack Connection in Area POPs of type B)).

The Operator Rack Connection consists of 2 parts:

(i) ODF – FO-VZ part of RCF

EPT is responsible to provide cabling in order to have an end-to-end optical connection form ODF to the Operator rack.

(ii) FO-VZ-Operator rack part of RCF

Break-out cables with 24 fibres shall be used for this RCF. The Operator shall only order new RCFs when 75% of previously installed RCF fibres are used. Per order a maximum of 3 x 24 fibres is allowed.

The marking of the RCF shall be done by the Operator. After ordering a new RCF, the Operator will receive the designations of the different fibres. It is the Operators responsibility to mark the fibres on break-out cable according these designations on both ends of the break-out cable.

5.1.1.3 Operator Rack Connection in Area POPs of type C)

In case of type C) Area POPs, EPT will install the RCF (in this case the RCF consists of a fibre optic cable, cf. Schedule 2 - Service Description – Operator Rack Connection, *Operator Rack Connection in Area POPs of type C)*), connect the fibres to the ODF and to the OHDF installed in the Operator’s outside shelter. The RCF consisting of a fibre optic cable will be installed in increments of 48 fibres – a new order shall only be placed if 75% of the capacity of all RCFs belonging to a given Operator is used.

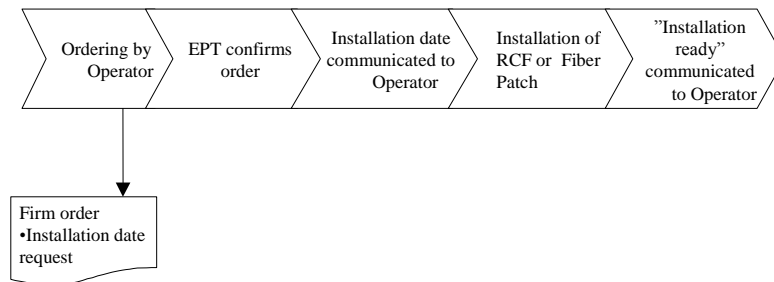
Orders of RCFs will be done in increments of 48 fibres.

The marking and testing of the RCF shall be done by EPT. To install the termination panels of the OHDF, the Operator shall grant EPT access to his shelter.

5.1.2 General principles for ordering RCFs

The Operator can order RCFs through a written firm order, which shall define and detail precisely per used ODF Site located in an Area POP the required capacity according to the rules described under 5.1.1.2 and 5.1.1.3 and specify the Ready for Service Date at which the Operator wants the said RCF to be ready. In any case, the effective Ready for Service Date of RCFs shall not occur before T30 as from the firm order effective date. EPT shall confirm the receipt of every firm order and inform the Operator when the installation of the related RCFs and termination panels is completed.

Figure: Overview of the ordering process of tie cables



5.1.3 Term and billing

The minimum period of service for any RCF shall be twelve (12) months as from its Ready for Service Date. If an Operator terminates service of a RCF before the end of the said minimum period of service, the Operator shall pay to EPT a sum equal to twenty percent (20%) of the rental charges applicable to such a RCF, being the rental charges applicable on the Ready for Service Date and calculated for the remaining period of its minimum term of service.

For each RCF and associated products and services ordered by the Operator, the Operator shall pay to EPT monthly in advance the applicable connection and rental charges as specified in Schedule 6 – Tariffs.

5.2 Provisioning procedure of FA

5.2.1 Definition

The ordering procedure for FA Services covers the following tiered inter-Party activities:

The Operator's submission of a FA activation request and EPT's reply to that request either in a positive or in a negative way,

In case of a positive answer, EPT will

- In case of type A) Area POPs: install a direct fibre patch between EPT's ODF and Operator's rack within a time frame T2
- In case of type B)+C) Area POPs: install a fibre patch between EPT's ODF through the pre-ordered RCF to Operator's rack within a time frame T2.

After installation EPT will send a message "FAO_Activated" to the Operator. Billing period will begin at the 1st working day after the sending of the "FAO_Activated" message to the Operator.

5.2.2 General considerations

EPT shall not accept any order for FA Service unless the following prerequisites have been fulfilled:

- An individual FA Agreement has been signed between the Parties.
- A Co-Location Floor Space or Rack Space at Area POPs on the concerned ODF Site exists.
- The installation of a RCF has been completed in case the ODF is located in an Area POP type A) or B).
- The FA ordering process is Operator-controlled.

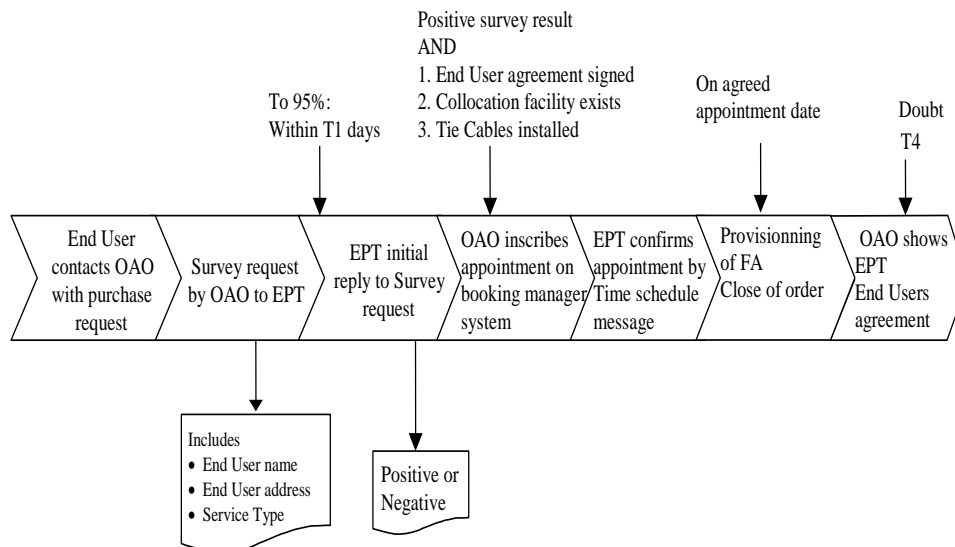
This means that:

- End-Users shall contact directly the Operator they wish to purchase telecommunications services from,
- Before signature of an order for an FA Service the Operator shall fully and precisely inform the End-User about the procedures and responsibilities in case of providing service to the End-User through FA Service and about the related impacts on his/her existing telecommunications services. Any End-Users existing Service from EPT will continue to be provided and billed unless the End-User cancels this Service himself,
- EPT shall not accept any orders for FA Services issued directly by an End-User,
- Only the Operator shall communicate with EPT.
- Submission of FA activation request shall only be accepted if made by automatic file transfer via Web service in SOAP format.

In case of doubt or of any claim raised by the End-User or by an Operator impacted thereby, the new Operator contracting service with the End-User shall provide upon first request and within T4 due evidence of the End-User's valid consent by submitting the original request-form signed by the End-User. Such documents shall be kept and archived by the Operator at least for the period specified by applicable Luxembourg law for contractual documents.

An Operator can submit a survey request for provisioning of FA Service in those local area networks where this Operator has contracted Co-Location Floor Space or Rack Space. To determine the relation between the End-User address to his/her serving ODF site, the Operator can refer to the EPT's Internet database dedicated to such inquiries.

Figure: Ordering process for FA Service.



5.2.3 Appointment handling and Provisioning Process of the patch cord in the Area POP

The following appointment handling procedure is valid for and applicable to the provision of FA Services. For the provision of the FA Services, timely and suitable coordination between EPT, the Operator and the Operator's concerned End-User is required in order to fulfil and achieve the installation of the FA Services.

After the Operators transmission of an FAO activation request, EPT will answer in a successful case to the Operator with an XML message of the type "FAO_Activation success" containing all necessary information like order number, circuit number, ODF connection point and so on. Upon this, EPT will install within a time frame T2 the corresponding fibre patches between EPT's ODF and Operators rack (type A) or between EPT's ODF through the pre-ordered and installed RCF to Operators rack (type B+C) as described in Schedule 2 and Schedule 5. After installation of the fibre patches, EPT will send to the Operator an XML message of

the type “FAO_Activated” and close the FAO order process.

The Operator shall arrange an appointment directly with the concerned End-User for the fulfilment of the provisioning of the FA Services after receiving the “FAO Activated” message from EPT. EPT will not intervene at the customer premises side.

The Operator shall be responsible for all the services deployed on this line as from the installation date onwards.

Should the requested FA installation fail for any of the below reasons, EPT shall inform the Operator by the electronic messaging system:

- Defect optical fibre in a section,
- Damaged cable within a section of the path for that FA,
- Incoherence in the allocation of tie cable connection points,
- Mismatch between FA survey request and FA provisioning order.

5.2.4 Submission of an FA Activation Request

The Operator shall submit a FA Activation Request of the provision type “FAO New” to EPT in the form of a XML message as described in the document “Procédure d’échange de messages entre l’EPT et les OAO pour le dégroupage de la fibre optique (FAO)” published on EPT’s internet site.

A submitted FA Activation Request shall contain all mandatory data as described in above mentioned procedure description.

EPT will endeavour to reply to ninety-five percent (95%) of the received Activation Request within the timescale T1 defined in Schedule 7 (Parameters) by sending back either (i) a negative answer (FAO ActivationNoSuccess) indicating the relevant reasons thereof, or (ii) a positive answer (FAO ActivationSuccess) with the relevant technical information on the FA.

The following reasons will nevertheless lead to a negative survey answer:

- Mandatory XML file information is missing or incorrect,
- End-User’s installation address is not complete or cannot be determined,
- End-User’s address is not connected to EPT’s point-to-point FTTH local network,
- Address is not served by the indicated ODF,
- Unallocated RCF capacity is not available.

A complete up to date list of the reasons leading to a negative answer is published on the EPT’s website, including the order of the analysis of the parameters of the survey.

In case the key conditions of FA submission are met and essential information has been provided, EPT will handle all received valid Activation Requests in a non-discriminatory way based on the “first in - first served” principle and in the same manner it handles its own internal requests for FA.

In case the Activation Request results in:

- a) a positive answer to an Activation Request for FA Services, EPT will provide to the Operator a EPT service order number reference number of the circuit as well as the connection point in the ODF. EPT will install the fibre patches in the Area POP between EPT’s ODF and Operator’s rack within a time frame of T2 and send afterwards a XML message “FAO_Activated” back to the Operator. Billing period for the FAO service will start the 1st working day following the sending of the activated message.
- b) a negative answer, no other action is taken by EPT as far as the EPT’s search engine showed a spare FA route for a specific address. However, in case the search engine indicated that no fibre route is available, EPT shall charge amount applicable to the negative answer as specified in Schedule 6 – Tariffs

5.2.5 Connection of the in-house cabling at the End-User premises

The Operator will proceed to the customer and is responsible for any connection and installation at the customer’s premises.

To get familiar with the different types of FO-NTPs and avoid service interruptions at customer’s premises, the Operator has to fulfil a mandatory introduction at EPT’s site, 2 rue Emile Bian, L-2999 Luxembourg. This introduction handles in theory and practice the fibre management and installation of pigtailed and patch cords on the different FO-NTPs. The related phone number for an appointment is 4991-5779 and the applicable fee is specified in Schedule 6 – Tariffs.

The instructions given during this introduction must be applied on field when handling an EPT FO-NTP.

In case the Operator has problems to successfully finish the connections on the FO-NTP or has damaged one or more fibres, the procedure described in 4.4.2 applies. EPT’s FA service responsibility terminates at the FO-NTP described in Schedule 1 - Service Description – Fibre Access (FA). All eventually necessary in-house cabling as well in single family houses as in residential houses have to be realized under the responsibility of the Operator. It is not allowed to disconnect any equipment on the customer’s premises until the customer has cancelled the services delivered by these equipments.

Before the Operator submits an FA survey request for a multi dwelling building, he has to check if an optical fibre in-house cabling exists and is terminated inside the concerned customer's premises. The Operator transmits this information during FA activation request to EPT.

In multi dwelling buildings where the Operator detected a fully installed optical fibre in-house cabling connected to the FO-NTP and connected inside the customer's premises, EPT will realize inside the FO-NTP the connection between incoming optical fibre and the mounting in-house optical fibre.

In multi dwelling buildings without a fully installed optical fibre in-house cabling, EPT will install an SC APC 9° hand over connector outside the FO-NTP that allows the Operator to interconnect the requested fibre to an in-house cabling or equipment he intends to install or has already installed.

If the Operator decides to install itself the optical fibre in-house cabling of the multi dwelling building, it should connect all the apartments of the building, thus avoiding the blocking of the mounting in-house infrastructure only for the cabling of one sole customer.

The Operator is responsible for any connection and installation inside the customer's premises.

5.3 Migration of FA Service

5.3.1 Generalities

The receiver Operator can cancel the FA service of a donor Operator provided the End-User has prior requested such cancellation by formally signing the necessary authorisation form and confirming expressly that it has complied with all its contractual obligations vis-à-vis the donor Operator.

5.3.2 Migration of FA service from a donor Operator to a receiver Operator

The receiver Operator shall submit a FAO migration request to EPT, FAO_migration request to EPT in the form of a XML message as described in the document "Procédure d'échange de messages entre l'EPT et les OAO pour le dégroupage de la fibre optique (FAO)" published on EPT's internet site.

The subsequent combined order for FA migration shall be handled in the following way:

- Migration shall be done by EPT at the date and time validated on the EPT's on-line booking manager system,
- Disconnection of the concerned FA Service optical patch-cord of the donor Operator by EPT. No presence of the donor Operator is needed. The patch-cord will be cut and removed. An optical patch cord between the ODF and the receiver Operator's equipment will be installed according the description in chapter 2.1 to 2.3 of Schedule 2 – Service Description. As from the moment of successful migration activation onwards, the receiver Operator shall be responsible for all services deployed on this line.
- For transfer of an active FA Service and where the existing number has to be ported to the receiver Operator, the standard procedure for number porting as defined by the working group in the document of May 2000,

shall separately be complied with between the donor and the receiver Operator

In case of successful migration, the receiver Operator shall update the ILR database for fixed number portability services.

5.3.3 Migration of FA from Operator to EPT

In case the receiver Operator is EPT, the following rules shall apply in addition to the provisions set forth in Article 5.4.2 above.

EPT shall inform the donor operator by mail or XML message at least three (3) working days before the effective migration date.

On the indicated migration date, EPT shall disconnect the concerned FA Service optical patch cord of the donor Operator. No presence of the donor Operator is needed. The patch-cord will be cut and removed.

As from the moment of successful migration activation onwards, EPT shall be responsible for all services deployed on this line.

For migration of an active FA Service and where the existing number has to be ported to EPT, the standard procedure for number porting as defined by the working group in the document of May 2000, shall separately be complied with between the donor and EPT.

In case of successful migration, EPT shall update the ILR database for fixed number portability services.

5.4 Hand-back Procedure

In case an End-User terminates its services provided by the Operator through FA, this Operator shall inform EPT in accordance with the procedures and principles defined in point 4 "property rights" that the FA has become available for reallocation.

The Operator shall send a FAO_deletion request to EPT in the form of a XML message as described in the document "Procédure d'échange de messages entre l'EPT et les OAO pour le dégroupage de la fibre optique (FAO)" published on EPT's internet site.

A submitted FA _deletion request shall contain all mandatory data as described in above mentioned procedure description.

EPT shall confirm message valid FAO deletion request by a XML message "FA Deleted" sent to the Operator within T1.

This allows the Operator to re-use an eventual "Tie-Cable Connection point number" from that time onwards

The rental billed to the Operator for this line shall be terminated at the due date indicated by the Operator in his FAO_deletion message. The indicated due date cannot be prior to the receiving date of the deletion message. If the indicated due

date is not a working day, the first working day following the indicated due date will be taken into account.

In case of incoherence of the submitted mandatory hand-back information after validation in the EPT's database, this stated incoherence will be indicated in a reply message to the Operator.

The FA shall not be disconnected until the incoherence has been duly clarified with both Parties' best endeavours. The rental of the FA billed to the Operator shall continue until the FA can finally be effectively disconnected.

5.5 Cancellation of an order before activation

If an Operator wants to abandon its request for FA Service after submission of a formal order by the electronic messaging system, it shall send a FAO_cancellation request to EPT in the form of a XML message as described in the document "Procédure d'échange de messages entre l'EPT et les OAO pour le dégroupage de la fibre optique (FAO)" published on EPT's internet site.

A submitted FA _cancellation request shall contain all mandatory data as described in above mentioned procedure description.

EPT shall confirm a valid FAO_cancellation request by a XML message "FA_Cancelled" sent to the Operator within T1.

In case the time stamp of EPT receiving the cancellation order from the Operator is later than the time stamp of sending an "FAO_Activated" message by EPT to the Operator (as described here above in chapter 5.3.3), EPT will charge the full connection charge for that type of service as defined in Schedule 6 – Tariffs.

Schedule 6 – Tariffs

This schedule presents the specific tariffs applicable to the FA Service.

6.1 Fibre Tie cables

Item	Euro
Connection charge for RCFs with 24 fibres Area POP type B)	1.169.-
Connection charge for RCFs with 48 fibres Area POP type C)	2.338.-
Monthly charge for RCFs – per 24 fibres	2,9.-
EPT manpower for special works required by the Operator - per hour	See point 6.3 below

6.2 Fibre Access Service (FA Service)

Item	Euro
Connection charge FA connection and measurement at ODF and at customer's premises including travelling	119,51.-
Monthly rental for a FA service	17,75.-
Monthly rental per fully connected in house optical fibre in multi dwelling buildings installed by an Operator or EPT at its own costs	Subject to Working Group's conclusions
Introduction into fibre management and installation works at the FO-NTP	300.-
Negative answer to FA order* or cancellation of an order before activation	14,98.-
FA Hand-back charge	29.-
FA Migration	140,22.-
FA Wrongful Repair Request	Real costs
EPT manpower for special works required by the Operator - per hour	See point 6.3. below

*Only applicable in case EPT's search engine showed clearly that the specific address is not yet served by EPT's FA point to point FTTH network.

6.3 Actual EPT Manpower fee – per hour

Actual EPT manpower fees - per hour	Euro
Carrière supérieure	77,89
Ingénieur technicien	77,41
Expéditionnaire technique	65,49
Travel fees	3,55
All manpower fees are based on the Luxembourg price index 737,83. They will be updated following the evolution of this price index	

6.4 Fault Repair

6.3.1 The fault repair is achieved within T40.

<i>Time of intervention</i>	<i>Origin of the fault is situated</i>	<i>Price</i>
Business Hours	On EPT's side	For free
Business Hours	On Operator's side	Price A

6.3.2 The Operator wishes that the fault repair be done prior to another End-User's request or outside working hours. In this case, the following prices are applicable:

<i>Time of intervention</i>	<i>Origin of the fault is situated</i>	<i>Price</i>
Priority from 7am-7pm (Monday to Friday) and 8am-12pm (Saturday)	On Operator's or on EPT's side	Price B
From 7pm-7am from Monday to Friday, Saturday from 12am on and Sunday	On Operator's or on EPT's side	Price C

6.3.3 Manpower fees

- Price A = Actual EPT manpower fee - per hour plus surcharges following the table below
- Price B = Actual EPT manpower fee - per hour plus surcharges following the table below with a minimum of 250 Euros per intervention
- Price C = Actual EPT manpower fee - per hour plus surcharges following the table below with a minimum of 500 Euros per intervention.

For the avoidance of doubt, the prices A, B and C will not be charged by EPT to the Operator in case the concerned fault is due to a Force Majeure event or a more general failure concerning several End-Users.

<i>Time:</i>	<i>6h00-7h00</i>	<i>07h00-19h00</i>	<i>19h00-22h00</i>	<i>22h00-6h00</i>
Monday to Friday	50%	0%	50%	65%
Saturday	50%			65%
Sunday	70%			85%
Legal and public holiday	200%			215%

Schedule 7 - Parameter Schedule

7.1 Provisioning of FA

Timer	Value	Description
T1	2 working days	Maximum response time to an activation or cancellation request send in form of a XML message via SOAP/webservices
T2	10 working days	Time frame within which EPT will proceed to the installation of the optical patches in the Area POP between EPT's ODF and Operators rack. Time Frame begins at the 1 st working day after EPT's sending of a "FAO_Activation Success" message to Operator and ends at the 10th working day after sending the above mentioned message.
T4	5 working days	Delivering by Operator to EPT of the original FA request form signed by the End-User in case of doubt

7.2 Provisioning of tie cables

Timer	Value	Description
T30	4 weeks	Provision of ordered RCF

7.3 Fault Reporting and Repair

Timer	Value	Description
T40	5 working days after the issuance day of a Fault Report	Time period to achieve 95% of fault repair requests.

7.4 Other

Timer	Value	Description
T51	5 working days	Provision of an internet address and password to the Operator to access the ODF information
T52	20 working days	Maximum period between the declaration of an Operator that he is interested in FA Services and the acceptance of first electronic exchanged file

Schedule 8 – How to transmit the “Demande de raccordement souterrain” to the EPT by the Operator, on behalf of the End-User

8.1 Request

A standard form “Demande de raccordement souterrain” is available at EPT’s Web site www.pt.lu or at the Operator’s simple request.

The Operator signs on behalf of the End-User a duly completed form and transmits it to EPT, provided that the Operator has been effectively mandated by the End-User in this respect. The Operator will explicitly indicate in the proxy document to be signed by the End-User that charges will be due for the realisation of the “raccordement souterrain”.

The Operator is not obliged to provide automatically EPT with a written proof of the mandate when transmitting a signed and completed “Demande de raccordement souterrain”. However, the Operator will provide EPT with a written proof at EPT’s simple request.

8.2 Invoicing

Within a delay of five (5) working days after the day of receipt of the “Demande de raccordement souterrain”, the End-User on behalf of whom the Operator has transmitted to EPT the request, will receive a letter from EPT indicating the charges for realising the “raccordement souterrain” according to its price list in force.

8.3 End-User contact for the realisation of the “raccordement souterrain”

Within a delay of fifteen (15) days after the day of receipt of the “Demande de raccordement souterrain”, the “Projections” Service within EPT’s Fixed Infrastructures Department will contact the End-User directly in order to realise the “raccordement souterrain”.

Before the actual beginning of the “raccordement souterrain”, the End-User will be required to confirm its consent to the applicable charges, as indicated in the letter within the meaning of Article 8.2 of Schedule 8 above.