Regulatory Authority for Electronic Communications, Postal Affairs and Press Distribution
Decision No. 2020-1432 of 8 December 2020
Specifying the terms and conditions for accessing ultra-fast broadband optical fibre electronic communications lines

The Regulatory Authority for Electronic Communications, Postal Affairs and Press Distribution (hereinafter “Arcep” or “The Authority”),

Having regard to Directive (EU) 2018/1972 of the European Parliament and Council of 11 December 2018 establishing the European Electronic Communications Code;

Having regard to No. 2002/21/EC of the European Parliament and Council of 7 March 2002 on a common regulatory framework for electronic communications networks and services (Framework Directive), notably its Articles 6, 7 and 12, amended by Directive 2009/140/EC of the European Parliament and Council of 25 November 2009;

Having regard to Directive No. 2002/19/EC of the European Parliament and Council of 7 March 2002 on access to, and interconnection of electronic communication networks and associated facilities (“Access Directive”) notably its Article 5, amended by Directive 2009/140/EC of the European Parliament and Council of 25 November 2009;

Having regard to Recommendation No. 2010/572/EU of the European Commission of 20 September 2010 on regulated access to next generation access networks (hereinafter “NGA Recommendation”);

Having regard to the French Postal and Electronic Communications Code (hereinafter “CPCE”), notably its Articles L. 32-1, L. 33-6, L. 34-8, L. 34-8-3, L. 36-6 and R. 9-2 to R. 9-4;

Having regard to the French Construction and Housing Code, notably its Articles L. 111-5-1, R. 111-1 and R. 111 – 14;

Having regard to the Decree of 16 December 2011 amended regarding the application of Article R. 111-14 of French Construction and Housing Code;

Having regard to the Decree of 6 December 2018 taken in application of Article L. 33-11 of the French Postal and Electronic Communications Code on assignment of “fibre area” status;

Having regard to Arcep Decision No. 2009-1106 of 22 December 2009 specifying, in application of CPCE Articles L. 34-8 and L. 34-8-3, the access terms and conditions for ultra-fast broadband optical fibre electronic communications lines and the instances in which the share access point can be located on private property;

Having regard to Arcep Decision No. 2010-1312 of 14 December 2010 specifying, in application of CPCE Articles L. 34-8 and L. 34-8-3, the access terms and conditions for ultra-fast broadband optical fibre

electronic communications lines nationwide, except in very high-density areas;

Having regard to Arcep Decision No. 2013-1475 of 10 December 2013 amending the list of very high-density areas' municipalities defined by Arcep Decision No. 2009-1106 of 22 December 2009;

Having regard to Arcep Decision No. 2015-0776 of 2 July 2015 on the technical and operational processes for ultra-fast broadband optical fibre electronic communications network sharing;

Having regard to Arcep Decision No. 2017-0972 of 27 July 2017 proposing to the Minister responsible for electronic communications the procedures and conditions for assigning the status of de "fibre area" as well as the obligations that may be attached to assignment of that status;

Having regard to Arcep Decision No. 2018-0170 of 22 February 2018 on collecting information regarding the deployment and marketing of fixed broadband and ultra-fast broadband networks;

Having regard to the Arcep Recommendation of 23 December 2009 on the access terms and conditions for ultra-fast broadband optical fibre electronic communications lines;

Having regard to the Arcep Recommendation of 14 June 2011 on the access terms and conditions for ultra-fast broadband optical fibre electronic communications lines in certain buildings in very high-density areas, notably those with fewer than 12 units;

Having regard to the Arcep Recommendation of 25 April 2013 on identifying fibre to the home lines;

Having regard to the Arcep Recommendation of 21 January 2014 on the access terms and conditions for ultra-fast broadband optical fibre electronic communications lines for buildings with fewer than 12 units and business premises in very high-density areas;

Having regard to the Arcep Recommendation of 7 December 2015 on implementing the obligation of completeness for fibre to the home networks outside of very high-density areas;

Having regard to the Arcep Recommendation of 24 July 2018 on the consistency of fibre to the home network deployments;

Having regard to the request for opinion made to the Competition Authority of 3 July 2020;

Having regard to the Competition Authority Opinion No. 20-A-07 of 15 September 2020;

Having regard to the Arcep public consultation on the Authority's draft provisions and Recommendations detailing the terms and conditions for accessing ultra-fast broadband optical fibre electronic communications lines, which ran from 6 February to 17 March 2020, and the responses to this public consultation;

Having regard to the Arcep public consultation on the draft Decision specifying the terms and conditions for accessing ultra-fast broadband optical fibre electronic communications lines which ran from 7 July 2020 to 14 September 2020, and the responses to this public consultation;

Having regard to Arcep's notification to the European Commission, the Body of European Regulators for Electronic Communications (hereinafter "BEREC") and EU national regulatory authorities of the draft Decision specifying the terms and conditions for accessing ultra-fast broadband optical fibre electronic communications lines, of 26 October 2020;

Having regard to the European Commission comments of 26 November 2020;

After having deliberated 8 December 2020,

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1 Decision background and purpose

The terms used in the present Decision whose first occurrence is followed by an asterisk are defined in Annex 1 of Decision No. 2015-0776 of 2 July 2015.

1.1 Background to fibre to the home deployments

The deployment of ultra-fast broadband fibre to the home electronic communications networks (hereinafter FttH networks) are now proceeding at a rapid pace. Over the course of 2019, building operators* (aka infrastructure operators) made 4.8 million fibre access lines across the country connectable, thereby confirming the accelerated pace off rollouts observed over the previous years. Around 50% of households and business premises are thus currently eligible to connect to an FttH network. At the same time, the switchover from copper to fibre is progressing in the broadband and ultra-fast broadband retail market, and the increase in the number of ultra-fast access lines (+27% YoY in Q3 2019) is due largely to subscriptions to fibre plans.

Drawing on the consequences of the changes at work in the market, on 4 December 2019 Orange announced the gradual switchoff of the legacy copper network. This means that FttH networks will become the fixed local loop infrastructure of reference over the coming years.

Ten years after Arcep established the framework for fibre by distinguishing the obligations that apply in very high-density areas* and in less densely populated areas, it reviewed every aspect of the market when preparing for the sixth round of fixed market analysis, and assessed the success of this symmetrical framework for accessing ultra-fast broadband optical fibre network access. This assessment fully confirmed its relevance, and created the ability to highlight the need to specify and adjust a number of obligations, to factor in the significant increase in deployments, the announced switchoff of the copper network and new European provisions.

1.2 Purpose of the Decision

The purpose of the present Decision is to clarify the terms of the obligation, provided for in CPCE Article L. 34-8-3, according to which *"any entity establishing or having established in a building or operating an ultra-fast broadband optical fibre electronic communications line to serve an end user shall grant reasonable requests from operators for access to said line and the associated facilities, for the purpose of providing electronic communications services to that end user"* . It aims to specify:

- the obligation to complete deployments (**Section 2**);
- the obligation of non-discrimination, and in particular operational and technical safeguards to ensure the effectiveness of this principle (**Section 3**);
- the obligation to grant requests for access to offers with increased quality of service on FttH networks (**Section 4**);
- the obligation to ensure a minimum quality of service for general and business needs on FttH networks (**Section 5**);
- reporting obligations applicable to all operators (**Section 6**).

The present Decision shall apply, unless otherwise stated, to the entire country, whether very-high-density areas or any other territory.

1.3 Applicable legal framework

1.3.1 European legal framework

On 11 December 2018, the European Parliament and Council adopted Directive (EU) 2018/1972 establishing the European Electronic Communications Code. This Directive proceeded to amend the European regulatory framework that currently applies to electronic communications networks and services, abrogating with effect from 21 December 2020, Directives 2002/19/EC, 2002/20/EC, 2002/21/EC, 2002/22/EC.

Article 61 of Directive (EU) 2018/1972 came to amend Articles 12 of the Framework Directive 2002/21/EC and 5 of the Access Directive 2002/19/EC and provides in particular that:

> *"3. In particular, and without prejudice to paragraphs 1 and 2, national regulatory authorities may impose obligations, upon reasonable request, to grant access to wiring and cables and associated facilities inside buildings or up to the first concentration or distribution point as determined by the national regulatory authority, where that point is located outside the building. Where it is justified on the grounds that replication of such network elements would be economically inefficient or physically impracticable, such obligations may be imposed on providers of electronic communications networks or on the owners of such wiring and cables and associated facilities, where those owners are not providers of electronic communications networks. The access conditions imposed may include specific rules on access to such network elements and to associated facilities and associated services, on transparency and non-discrimination and on apportioning the costs of access, which, where appropriate, are adjusted to take into account risk factors.*
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> *Where a national regulatory authority concludes, having regard, where applicable, to the obligations resulting from any relevant market analysis, that the obligations imposed in accordance with the first subparagraph do not sufficiently address high and non-transitory economic or physical barriers to replication which underlie an existing or emerging market situation significantly limiting competitive outcomes for end users, it may extend the imposition of such access obligations, on fair and reasonable terms and conditions, beyond the first concentration or distribution point, to a point that it determines to be the closest to end users, capable of hosting a sufficient number of end-user connections to be commercially viable for efficient access seekers. In determining the extent of the extension beyond the first concentration or distribution point, the national regulatory authority shall take utmost account of relevant BEREC guidelines. If justified on technical or economic grounds, national regulatory authorities may impose active or virtual access obligations.*
>
> *National regulatory authorities shall not impose obligations in accordance with the second subparagraph on providers of electronic communications networks where they determine that:*
>
> *(a) the provider has the characteristics listed in Article 80(1) and makes available a viable and similar alternative means of reaching end users by providing access to a very high capacity network to any undertaking, on fair, non-discriminatory and reasonable terms and conditions; national regulatory authorities may extend that exemption to other providers offering, on fair, non-discriminatory and reasonable terms and conditions, access to a very high capacity network; or*
>
> *(b) the imposition of obligations would compromise the economic or financial viability of a new network deployment, in particular by small local projects.*
>
> *By way of derogation from point (a) of the third subparagraph, national regulatory authorities may impose obligations on providers of electronic communications networks fulfilling the criteria laid down in that point where the network concerned is publicly funded […]".*

Directive (EU) 2018/1972 is in line with the Framework Directive 2002/21/EC and Access Directive 2002/19/EC.

1.3.2 Arcep's competencies

Article L. 36-6 of the French Postal and Electronic Communications Code (CPCE) provides that:

'In compliance with the provisions of this Code and its implementing regulations ..., the Regulatory Authority for Electronic Communications and Postal Affairs specifies the rules concerning: [...]

2° The requirements applicable to the technical and financial conditions of interconnection and access, in accordance with Article L. 34-8 [...] and to the technical and financial conditions of access, in accordance with Article L. 34-8-3; […]

Decisions taken pursuant to this article shall, after approval by order of the Minister responsible for electronic communications, be published in the Journal officiel."

CPCE Article L. 34-8-3 provides that:

"Any person who establishes or has established in a building built or operates an ultra-fast broadband optical fibre electronic communications line to serve an end user shall grant reasonable requests for access to that line and the associated facilities from operators with a view to providing electronic communications services to that end user.

Access shall be provided under transparent and non-discriminatory conditions at a point located, except in the cases defined by the Regulatory Authority for Electronic Communications and Postal Affairs , outside the limits of private property and allowing the operative connection of third-party operators, under reasonable economic, technical and accessibility conditions. In the cases defined by the Regulatory Authority for Electronic Communications and Postal Affairs, access may consist of the provision of specific installations and network elements requested by an operator prior to equipping the building with ultra-fast broadband optical fibre electronic communications lines, in return for the assumption of a fair share of the costs by that operator. Any refusal of access shall be justified.

It shall be the subject of an agreement between the persons concerned. This shall determine the technical and financial conditions of access. It shall be communicated to the

Regulatory Authority for Electronic Communications and Postal Affairs at its request.

Disputes relating to the conclusion or performance of the agreement provided for in this article shall be submitted to the Regulatory Authority for Electronic Communications and Postal Affairs in accordance with Article L. 36-8.

In order to achieve the objectives set out in Article L. 32-1, and in particular with a view to ensuring the consistency of deployments and homogeneous coverage of the areas served, the Authority may specify, in an objective, transparent, non-discriminatory and proportionate manner, the terms and conditions of the access provided for in this Article."

In accordance with national law, and with European Law, through its Decisions No. 2009 – 1106 and No. 2010-1312, Arcep specified the general framework for access to ultra-fast broadband optical fibre lines for deployments carried out inside and outside very high-density areas.

In its Decision No. 2015-0776, the Authority specified the technical terms and conditions for implementing access.

The present Decision is a continuation of the above-mentioned decisions. Its purpose is to complete this framework by clarifying the above-mentioned obligations (part 1.2).

1.3.3 Procedure applicable to the present Decision

The present Decision is taken in application of CPCE Articles L.36-6, L.34-8 and L.34-8-3.

It complies with the rules of procedure provided for in a) of I of Article L. 34-8 and published in its Decision No. 2019-1685 dated 10 December 2019 adopting the rules of procedure.

The Authority submitted a first version of the draft Decision for public consultation. Twenty-one stakeholders responded to this public consultation.

Following this public consultation, the Authority amended its draft, and a second version of the draft Decision was then submitted for public consultation and to the Competition Authority for its opinion. Twenty-one stakeholders responded to this public consultation.

After receipt and consideration of the contributions and opinions, the draft Decision was notified to the European Commission, the national regulatory authorities (NRAs) of the other European Union Member States and to the Body of European Regulators for Electronic Communications (BEREC).

2 Fibre availability in less densely populated areas

As the FttH infrastructure is intended to replace the copper network, it is essential to ensure that it is available to the entire French population.

In less densely populated areas, the Authority considers it justified, in view of the increasing use of the premises “connectable upon request” mechanism, to strengthen the framework for this mechanism by requiring that building operators (aka infrastructure operators) deliver these lines within a reasonable period of time (**Section 2.1**), without which compliance with the obligation of completeness may be jeopardised.

In addition, while new buildings*, housing estates and single-family homes continue to be built across the country, the attrition of the copper network makes it essential to plan the terms and conditions for these new premises’ connection to the FttH networks within a reasonable period of time (**Section 2.2**).

Finally, as deployments continue to cover the territory, the operative availability of fibre for commercial operators, and ultimately end customers, also depends in practice on having the buildings identified in the building operators' information systems and the accuracy of the associated information. Errors and omissions must therefore be dealt with continuously to make all deployment areas actually connectable*. This is why it seems justified and proportionate for the Authority to impose a process for reporting and correcting missing or incorrect information, as well as a framework for deadlines for connecting premises that do not have a standardised identifier (**Section 2.3**).

In its opinion No. 20-A-07, the Competition Authority recalls that, *“in* [less densely populated areas]*, the optical local loop has the character of a natural monopoly and competition is structurally limited* [and that] it *is therefore crucial that network access offers are available in the wholesale market to enable commercial operators to serve the ultra-fast broadband market, with sufficient technical and economic autonomy to animate this market for the benefit of consumers and business users. “.* It thus states that it “[supports] *the measures applicable to all building operators that have established FttH networks, aimed at ensuring the availability of fibre in less densely populated areas”.*

2.1 Details regarding the connection of households and premises that are "connectable upon request"

In less densely populated areas in particular, the existence of dispersed housing and accessibility constraints may make specific deployment and pricing terms and conditions necessary. This section provides a framework for the conditions under which building operators may postpone the installation of an optical connection point, by imposing a maximum period of six months for the operative connection of households or premises that can be connected upon request (**Section 2.1.1**). It also provides a framework for exceptional cases for postponing the installation of an optical connection point in a household or premises that can be connected upon request until payment of a specific fee (**Section 2.2.2**)

2.1.1 Maximum period of six months to connect households or premises that are "connectable upon request"

The Recommendation of 7 December 2015 on implementing the obligation of completeness for fibre-to-the-home network deployments outside very high-density areas provides, under certain conditions, for the possibility of postponing the deployment of the network "in the immediate vicinity of these premises"[1], materialised in practice by the installation of the optical connection point (OCP), for certain households and business premises located in dispersed settlements, by making said installation subject to an actual request for connection. In its Recommendation, the Authority also considers that a period exceeding six months for the provision of the OCP would not be reasonable, in particular in view of the obligation of completeness, defined in Article 3 of the Authority's Decision No. 2010-1312, the objective of which is to guarantee that any end user present in the concentration point's service area can be connected quickly to the network deployed by the building operator. The residential and business premises in question are thus qualified as "connectable upon request". The above-mentioned Recommendation also specifies that information on the volume of households likely to be declared "connectable upon request" shall be made available for the entire area at the co-financing scale* from the first prior consultation regarding this area.

Since the adoption of the above-mentioned Recommendation, the Authority has been able to observe building operators' willingness to make increasing use of the "connectable upon request" premises mechanism in less densely populated areas, at the end of the completion period, in particular in private initiative areas[2]. In the absence of a framework of binding rules for building operators, this practice may have negative consequences, first, on compliance with the obligation to complete deployments within a reasonable period of time and, second, on commercial operators' need for visibility when marketing specific retail market offers to the customers in question, as they will want to provide them with reliable information on the eligibility deadlines for fibre.

Here, the Authority considers it justified and proportionate, in particular in view of the objectives mentioned in Article L. 32-1, in particular sub-paragraphs 3 and 4 of Para. II, and sub-paragraph 1 of Para. III, to impose what it had previously recommended for the building operator operating in less densely populated areas, i.e. to grant commercial operators' reasonable requests for the connection of households or business premises with the status of "connectable upon request" within an announced reasonable period of time, which may not, except in duly justified exceptions, exceed six months.

In addition, given the observed similar characteristics of deployments in less densely populated areas and low-density pockets in very high-density areas, as set out in its Recommendation of 14 June 2011[3], the Authority considers it consistent and reasonable that building operators also be able to use this

[1] Decision No. 2010-1312 of the Authority

[2] Decision No. 2018-1597-RDPI of the French Regulatory Authority for Electronic Communications and Postal Affairs of 20 December 2018 giving formal notice to Orange to comply with its obligation to complete fibre-to-the-home networks outside very high-density areas

[3] Arcep's Recommendation of 14 June 2011 on the terms and conditions for access to ultrafast optical fibre lines for certain buildings in very high-density areas, in particular those with fewer than 12 units.

mechanism in very high-density areas' low-density pockets, for premises where there may be uncertainty over the degree of short-term appetite amongst potential end customers for an FttH connection. In this case, it appears justified and proportionate, in particular in the light of the above-mentioned objectives, that the same conditions apply.

The above-mentioned maximum period of six months allows the building operator, as specified in the Recommendation dated 7 December 2015, to be able to organise itself to plan potentially large-scale works, in particular those needed to install this type of connection in dispersed settlements. At the same time, the period is reasonable because it allows the commercial operator to announce a deadline to the end user, and for end users not to see the waiting time excessively prolonged before being able to take advantage of ultra-fast broadband electronic communications services.

In the event that a premises identified as "connectable upon request" is the subject of an actual request for connection before the end of the building operator's deployments, to enable homogeneous IT and business processes for handling such a request, it seems reasonable for an identical period, i.e. a maximum of six months, be required from commercial operators for the installation of the OCP serving the premises in question. In the event that the building operator desires a lengthier period, that extended period shall be duly justified and clearly indicated to commercial operators sufficiently in advance.

2.1.2 Framework for exceptional cases of postponement of the installation of an optical connection point for premises identified as connectable upon request until the payment of a specific fee

In less densely populated areas, whether covered by private or public initiative, building operators have chosen to offer a single, equalised flat rate for all the lines in the co-financing areas in question. This is a practice that Arcep intends to promote, as it corresponds in particular to a societal demand, which is careful to ensure that subscription prices for an FttH service are the same in rural and urban areas.

In some areas, the cost of installing the connection point for certain premises may deviate significantly from the average due to being dispersed or hard to access. In this case, outside the planned deployment areas that operators announced very early on based on private investment[4], it may seem appropriate to treat certain very costly lines differently, in particular when it makes it possible to provide access to virtually all premises at prices usually found elsewhere in the country, and when this would not be possible without it. This benefit would nevertheless be lost if the number of lines concerned by this specific treatment were to prove too large: their number must therefore be limited. In addition, these premises shall be pre-identified during the prior consultation to give to commercial operators adequate clarity.

As a result, Arcep considers that, for these premises, the installation of the optical connection point may, in the event of a reasonable request for connection, be conditional on the payment of a dedicated fee, provided that this fee does not exceed the specific costs of installing the point in question. Indeed, it appears that by making the installation of the optical connection point subject to the payment of a dedicated fee, the building operator is not exposed, by construction, to any commercial risk justifying the allocation of a premium.

The possibility of making the installation of the optical connection point subject to the payment of a dedicated fee is reasonable, in particular in the light of the pricing principles and the obligation of completeness provided for by the regulatory framework, only if it is used in a targeted and justified manner.

Here, it seems necessary, particularly in view of commercial operators' need for clarity, that a clear, objective and pre-defined criterion separate those premises "connectable upon request" that may be subject to a dedicated fee from the rest of the premises. The Authority therefore considers it relevant

[4] In concrete terms, this excludes deployments in the area covered by the commitments under CPCE Article L. 33-13 following the call for expressions of investment intent, known as the "AMII area".

that this criterion take the form of a cost threshold determined by the building operator, above which the premises could actually be affected by the postponement of the OCP installation and be subject to specific pricing. The Authority considers that it would not, *a priori*, be reasonable for this threshold to be lower than an amount of an order of magnitude higher than the standard flat rate charged by the building operator. In view of the access conditions currently applied by all operators[5], this represents a threshold of around €5,000, in line with the binding commitments made by operators in the context of calls for expressions of local interest (known as "AMEL").

In addition, the Authority considers that the maximum volume of premises likely to be affected by this mechanism may not exceed 4% to 8% of the premises in the area subject to deployment, as has been observed in borderline cases in projects resulting from "AMEL".

Finally, over time, if the economics of the project allow it, all or part of the premises concerned must gradually be reintegrated into the standard flat rate.

This framework for giving the building operator deploying a network in less densely populated areas the ability to postpone and condition the installation of a segment of this network is justified and proportionate, in particular with regard to the objectives mentioned in Article L. 32-1, in particular sub-paragraph 3 and sub-paragraph 4 of Para. II.

2.2 Connecting new, additional or dispersed buildings and housing estates

The obligation of completeness, as set out in Arcep Decision No. 2010-1312, requires the building operator to deploy, in a given area, a back-up network enabling all the inhabitants of that area to have access to an ultra-fast broadband optical fibre service, within a reasonable period of time from the start of the rollout (hereinafter "the completion deadline") and ensuring a sufficient number of potential customers for the connection of third-party operators under reasonable economic conditions. In a context where optical fibre networks are intended to become the infrastructure of reference for fixed internet access, it is necessary to specify the terms of this obligation for premises created by new buildings and housing estates (**section 2.2.1**) or which could not be connected before the completion deadline (**section 2.2.2)**. Those provisions are necessary to ensure complete and uniform coverage of the territory, leaving no user behind *ex post facto,* and ensuring that third-party operators can fully exploit the economic potential of the area in question, without this representing an unreasonable burden on the building operator.

2.2.1 Deadline for connecting new buildings and housing estates

Articles L. 111-5-1 and L. 111-5-1-1 of the Construction and Housing Code provide that new buildings and new single-family homes must be equipped with the ultra-fast broadband optical fibre electronic communications lines required for households or business premises to be served by a public ultra-fast broadband optical fibre electronic communications network. For an ultra-fast broadband optical fibre service to be available there, it is also necessary that these new buildings and housing estates be actually connected by the building operator for the area where they are located.

With the attrition of the copper network, it seems necessary for the Authority to specify building operators' obligations of with regard to connecting new buildings and housing estates in the parts of the country where the obligation of completeness applies.

When the deadline provided for in Article 3 of Decision No 2010-1312 (hereinafter "the completion deadline") for a given area has been reached, it appears justified and proportionate, in particular in light of the objectives mentioned in Article L. 32-1, in particular sub-paragraph 3 and sub-paragraph 4 of Para. II, and sub-paragraph 1 of Para. III, that the building operator ensures, within a reasonable period of time which may not exceed three months, the equipment and connection of new households and business premises resulting from the construction of a new building, a new housing estate or a new single-family home. The building operator must also include within the aforementioned maximum period of three

[5] Non-recurring *ab initio* co-financing rate per line of around €500 per scheduled line.

months, the notice period for the network elements provided on this occasion[6], so that this latter period is expired by the end of the maximum period of three months. This last point thus allows occupants to have access to optical fibre services as soon as they arrive in the building.

This reasonable period of time begins from the moment the building operator makes the necessary infrastructure available, provided it had been informed within the three-month notice period by the contracting authority, builder or developer, and received the information needed to provision its horizontal network. In theory, the concentration point's entire service area is covered by the completion deadline. As a result, providing the necessary relevant information six months before delivery of the housing, as well as the provision of the infrastructure three months before delivery, are sufficient to enable an efficient operator to organise itself, including taking into account the building operator's incorporation of the notice period prior to commercial availability.

In the event that the relevant information could not be transmitted with a six month-notice period prior to the delivery of the housing, these premises must be treated as additional or dispersed (see section 2.2.2): the building operator is therefore required to equip them with optical fibre within a period that may not exceed six months from the notification or, where applicable, the agreement of the owner or co-owners.

In addition, in the event that the completion deadline has not been reached when the building operator has been informed by the contracting authority, builder or developer of the construction of a new building, a new housing estate or a new single-family home, and they have provided it with the information required to provision its horizontal network, it seems advisable that the building operator ensure the servicing of new household and business premises within a timeframe similar to that of its deployments to the surrounding buildings, and be able to give the project owner, builder or developer an indicative connection period.

Finally, the Authority recalls that operators can monitor the construction of new housing and premises by querying the SIT@DEL database (for "information system and processing of elementary data on new housing and premises") made available by the Ministry of the Ecological and Inclusive Transition.

2.2.2 Deadline for connecting additional or dispersed buildings and housing estates

Some buildings may not have a fibre connection by the completion deadline, in particular because of a past refusal by their owners or co-owners, or because of a failure to identify those premises in the building-scale information (in practice, in the enhanced prior information, or EPI). In these cases, it seems justified and proportionate, in particular with regard to the objectives mentioned in Article L. 32-1, in particular sub-paragraph 3 and sub-paragraph 4 of Para. II, and sub-paragraph 1 of Para. III, that the building operator ensure the fibre equipment of the households and business premises of which it had been notified within a reasonable period of time, which may not exceed six months from their notification or, where applicable, the agreement of the owner or co-owners.

2.3 Process for reporting and correcting missing data and ordering process not requiring a standardised identifier

Decisions No. 2009-1106, No. 2010-1312 and No. 2015-0776 successively specified the conditions for the provision and exchange of information required for providing access to and marketing ultra-fast broadband optical fibre electronic communications networks.

In this context, building operators provide commercial operators with information at the building level.

[6] The Authority points out that a notice period before the lines become commercially available is provided for, inter alia, in Articles 6 and 7 of Decision No 2015-0776. This decision specifies that the notice period must be reasonable and, in particular, that it must be 6 weeks for new buildings that must be equipped with an indoor concentration point.

In practice, this information takes the form of the enhanced prior information (or EPI files) including information relating to the location (postal address, geographical coordinates, references to external databases of addresses or roads and localities, etc.) and the availability of concentration points, optical connection points and buildings. These files are also shared with the Authority in accordance with Decision No. 2018-01707[7]. The EPI plays a strategic role in both the retail market for the marketing of lines with address information and in the wholesale market in the inter-operator ordering process.

As part of the multilateral work carried out under the aegis of Arcep, it became apparent that the EPIs contained a significant number of missing buildings, in particular business premises, as well as incorrect information. The Authority therefore plans to impose a process for reporting and correcting missing or incorrect information (**section 2.3.1**), as well as a specific ordering process that does not require a standardised identifier (**section 2.3.2**).

2.3.1 Process for reporting and correcting missing or erroneous data on building-level information

Missing buildings and incorrect information, especially concerning location, are an impediment to marketing FttH networks. Commercial operators need accurate addresses. Moreover, through their direct link with end customers, the same commercial operators are typically informed of these missing or incorrect buildings before the building operators. There is currently no industrial process to report them to building operators, however.

Given the importance of EPIs that provide information on FttH network eligibility, it seems reasonable to require building operators to set up an inter-operator process to allow commercial operators to report this missing or erroneous building-related information to them. As with other inter-operator processes, it would be advisable for such a reporting process to be identical for all building operators to allow commercial operators to pool the necessary developments. Work in this direction has been initiated by the operator community working within the Interop'fibre group.

In addition, it appears that there are two kinds of commercial operator reports: single or individual reports of a missing or erroneous building, e.g. following a request from an end customer, which are sent on regular basis and could be sent in batches, and occasional mass reports resulting, for example, from a systematic analysis carried out by the commercial operator.

Whatever the nature of the report, the mere existence of such an adapted process is not sufficient. In the current state of the dialogue with operators conducted through multilateral meetings, it is therefore appropriate to require building operators to add missing buildings and correct erroneous information in the EPI, within a reasonable period of time after receiving the commercial operator’s report, which may depend on the nature of that report.

To this end, in cases of single reports, regardless of whether they are sent in batches, it seems advisable that, within one week of the notification, the building operator corrects the error or adds the building or, in a complex case, informs the commercial operator of the additional time needed to correct the error or add the building. This one-week deadline seems reasonable in view of the operational processes already used by building operators to implement the one calendar day deadline for updating the information, as provided for in Arcep Decision No. 2015-0776. It is also particularly important that the commercial operator be able to provide end customers with reasonable clarity within such a time frame. In any event, the above-mentioned additional period shall not exceed three weeks, even in the most complex cases.

In the case of a mass report, it seems reasonable that the time limit could be extended, particularly given the need for sometimes more cumbersome processing to systematically correct a large amount of information, albeit without exceeding two months.

Every building operator should have to organise itself to ensure compliance with these deadlines and allocate specific resources to these tasks. These building additions and corrections generally require

specific manual checks. This additional burden on building operators is, however, proportionate in view of the challenge of diversifying competition on FttH networks, which goes by way of their usage in particular, and the obligations to provide available information as set out in Decisions Nos. 2009-1106, 2010-1312 and 2015-0776.

The obligations relating to the correction of missing or erroneous building-level information are justified and proportionate, particularly in relation to the objectives mentioned in CPCE Article L. 32-1, notably in sub-paragraphs 3 and 4.

Finally, in view of the IT developments necessary for the application of these provisions, the Authority considers that a period of six months from the publication of the present Decision is reasonable for their entry into force.

2.3.2 Specific ordering process that does not require a standardised identifier

Some households or business premises may not have a formal address or standardised identifier that operators use when exchanging information, notably in the enhanced prior information (EPI), where it may be difficult to identify. In practice, this situation makes it difficult, if not impossible, for the commercial operator to order a line from the building operator. In particular, these may be sites belonging to businesses with high demand for optical fibre equipment (e.g. shops located in shopping centres), which makes the difficulties that commercial operators encounter when ordering a line serving these premises all the more consequential, especially once the obligation of completeness deadline has expired.

It therefore appears justified and proportionate, particularly in view of the objectives mentioned in Article L. 32-1, in particular sub-paragraph 3 and sub-paragraph 4 of Para. II, and sub-paragraph 1 and sub-paragraph 3 of Para. III, to require the building operator, once the completion deadline has been reached for a given area, to provide commercial operators, via a specific ordering process (for example from a partial address or an *ad hoc* description of its location), the ability to access a line connecting a residential or business premises for use for which the commercial operator has not been able to order access using the standardised information (e.g. the building code indicated in the EPIs), within a reasonable period of time from the date of the order via this process. In practice, this standardised information is normally obtained from the information provided in accordance with Decision No 2015-0776 and its Annexes 3 and 4.

In the event that the premises in question are already identified by the building operator in the building-level information (EPIs) and is already connectable, or can be served by means of an optical connection point already installed by the building operator, the building operator shall make the line in question available as soon as possible.

If not, a period of three months is proportionate as part of the infrastructure necessary for the deployment of fibre may already be present, along with the facilities for installation in business premises (existing technical ducts, single occupant, lack of a general meeting, etc.).

In the event that the work and procedures necessary for the building operator to make the household or business premises connectable are particularly substantial (construction of the building's indoor fibre system, obtaining an authorisation from the co-owners and an agreement that may have to be signed, major civil engineering work to be carried out, etc.), this period may be longer than three months, but not more than six.

Furthermore, in the event that the completion deadline has not been reached, where the building operator has been informed by a commercial operator of the existence of a site that does not have a standardised identifier, it seems advisable that the building operator allow the commercial operator to order a line to the site in question within a timeframe similar to that of orders for the surrounding buildings, and be able to give it an indicative timeframe for placing an order.

3 Guarantees of operational and technical non-discrimination

Arcep Decision No. 2015-0776 of 2 July 2015 specified certain terms and conditions of the non-discrimination obligation provided for in CPCE Article L. 34-8-3 and Decisions Nos. 2009-1106 and 2010-1312, with regard to operational and technical processes.

The inter-operator work carried out under the aegis of the Authority has identified a number of persistent difficulties and risks in ensuring access to ultra-fast broadband optical fibre electronic communications networks with strong guarantees in terms of non-discrimination, which is necessary given the intensification of FTTH network deployment and usage.

This section imposes an obligation in terms of IT tools made available to operators concerning the information systems chain for FttH offers (**section 3.1**) and offers with increased quality of service provided on an FttH architecture with adaptation (**section 3.3**), and specifies operators' obligations with regard to the circulation of commercially sensitive information (**section 3.2**).

3.1 Strengthening non-discrimination guarantees for building operators' information systems and operational and technical processes

Non-discriminatory operational and technical processes are vital to maintaining effective and dynamic competition in the broadband and ultra-fast broadband market for the benefit of end users. Commercial operators' ability to recruit subscribers depends in particular on the fluidity of building operators' processes, especially when looking ahead to a mature market where new customers are acquired primarily through churn and not by winning over first-time subscribers.

The broadband and ultra-fast broadband market is currently undergoing a major technological transition with the deployment of optical local loops (OLL). During this deployment phase, end users have begun their gradual migration to fibre. This migration appears to be an opportune time to decide to switch operators. The non-discriminatory nature of operational and technical processes – in particular information relating to buildings, line eligibility, line ordering and delivery service and after-sales service – is therefore a major challenge to ensure that the migration does not lead to a less competitive marketplace.

During the preparatory work for the fifth round of analyses of wholesale markets for broadband, ultra-fast broadband and capacity services (2017-2020), commercial operators expressed their concern to Arcep about the existing non-discrimination guarantees for the information systems associated with networks operated by vertically integrated operators, in particular Orange.

In the grounds for Decision No. 2017-1347[8], the Authority stated that *"the use by vertically integrated operators of the same IT tools as those offered to third-party operators, or of common processes, with a view to ensuring equivalence of treatment, is likely to promote the efficiency of processes for the benefit of all operators, as well as competitive dynamics."*

As a result, in July 2017 Orange announced an action plan to the Authority comprising various milestones and which it has since completed with new actions. As announced in Decision No. 2017-1347, Arcep verified the implementation of the first two milestones during technical and IT audits of Orange's information systems. These audits resulted in two public reports by Arcep published in

[8] Decision No 2017-1347 of 14 December 2017 on the definition of the relevant market for the wholesale provision of local access at a fixed location, on the designation of an operator with significant power that market and on the resulting obligations imposed on that operator.

January[9] and June[10] 2019.

The conclusions of the report published by Arcep on 11 January 2019 indicate that:

> *"In addition to the actions decided in July 2017, Orange's new actions lead to the widespread use of the common tools to self-supply and external sales, offering strong guarantees in terms of non-discrimination, on the entire FttH IS chain, with the exception of ordering, which benefits from reinforced monitoring. The transmission of a monthly scoreboard to the Authority, subject to internal supervision, with the key performance indicators on all these processes will ensure continuous monitoring of compliance with the principle of non-discrimination."*

In its Opinion No. 17-A-09[11] on Arcep's draft market analysis decision on the wholesale broadband, ultra-fast broadband and capacity services markets, the Competition Authority invited Arcep to use a "symmetrical" approach to these issues:

> *"117. As regards the scope of the proposed measure, it appears to the [*Competition] *Authority that it does not result directly from Orange's position on the market but rather from the is rather justified in view of the control it enjoys, like any other building operator, over its downstream network at the concentration point. Therefore, if ARCEP were to choose to impose a form of access equivalence, it might seem appropriate, in order to be consistent with existing regulations, to impose the envisaged obligation on all building operators*.
>
> *118. The [*Competition] Authority *notes, moreover, that this seems to be possible in law, under conditions similar to those that allowed the enactment of the symmetrical frame."*

As shared optical local loops are operated by multiple operators, some of which are vertically integrated or do not guarantee an equivalence of inputs (EoI[12]) in the implementation of access to FttH networks, and in view of the foregoing, the Authority considers that it is essential, in the wake of the work undertaken by Orange, to impose additional guarantees of non-discrimination on building operators.

As the European Commission observes, *"... according to the Recommendation on non-discrimination obligations and consistent costing methods, EoI is the best way to ensure effective protection against discrimination because access seekers are thus able to compete with the operator's downstream activity ... using exactly the same set of regulated wholesale products, under the same conditions and through the same transactional processes.*[13]

However, notwithstanding the level of guarantee it provides, it could be disproportionate to impose on all building operators the equivalence of inputs in that it could profoundly call into question the organisational, technical and IT choices already implemented by the operators. Failing this, the Authority considers it justified and proportionate, in particular in view of the objectives mentioned in CPCE Article L. 32-1, in particular sub-paragraph 3 of Para. II and sub-paragraph 1 and sub-paragraph 3 of Para. III, to ask building operators to use "common" IT development tools and processes.

The Authority notes that the provision of EoI access implies the exclusive use of "common" IT tools and processes, in particular, so that an operator that guarantees equivalence of inputs[14], *a priori*, verifies this new obligation.

In its Opinion No. 20-A-07, the French Competition Authority states that it "*supports Arcep's decision to*

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[9] Evolution of Orange's FttH information systems, Report on the strengthening of non-discrimination guarantees of 11 January 2019

[10] Evolution of Orange's FttH information systems, Supplementary report on the strengthening of non-discrimination guarantees of 26 June 2019.

[11] Opinion No. 17-A-09 of 5 May 2017 relating to a request for an opinion from the Regulatory Authority for Electronic Communications and Postal Affairs on the fifth round of analysis of the wholesale markets for broadband, ultrafast broadband and capacity services.

[12] In its Recommendation 2013/466/EU of 11 September 2013, the Commission defines equivalence of inputs as: *'the provision of services and information to internal and third-party access seekers under the same conditions, including price and quality of service levels, schedules, systems and processes used, and the level of reliability and performance'.*

[13] European Commission Observations of 27 November 2017

impose [...]*, in terms of information systems and operational and technical processes, the establishment of 'common tools' to offer access to every operator that requests it, including any retail arm* [and] *Arcep's choice of an obligation that is imposed on all building operators, with regard to the control they exercise over their downstream network at the concentration point, as the* [Competition] Authority *had suggested in its 2017 opinion."*

Common tools by default

A tool or process is "common", within the meaning of the Authority, when it is used by a building operator's retail arm, or by any other economic entity linked to it, and carries out a downstream activity, exclusively through the interfaces offered to third-party operators. In this context, in particular, all of the flows of the building operator's retail arm or of the economic entity linked to the origin or destination of the latter's FttH building operator's functions, and concerning the functionality run by the tool, pass through the same interface as the one offered to third-party operators, and only through this interface. In addition, a common tool operates according to the same procedures and leads to the same processing for flows from the building operator's retail arm or related economic entity as for those from other operators.

The use of common tools throughout the FttH information systems chain ensures strong non-discrimination guarantees capable of meeting the competition challenges created by the accelerated pace of network rollouts and marketing. They make it possible to guarantee a similar availability rate and performance level for all operators, including any building operator's retail arm, since they require the latter to be supplied in the same way. The use of these tools also signifies that there are no other means for a vertically integrated operator's retail arm to access information or have access to privileged information (whether such access is voluntary or related to a matter of management of access rights in the information system) since, for all of the client operators, these tools must be the only means of accessing this information, which itself must be identical for everyone.

It therefore appears justified and proportionate that, by default, a building operator uses the same IT tools and processes, under the same conditions and delivering the same information for all operators, including any retail arm being supplied by it, and for the entire ultra-fast broadband optical fibre network information systems chain.

Where the transition to a common tool or the development of such a tool would not be proportionate, which will be assessed in the light of technical difficulties leading to a cost, development time or internal reorganisation that is too great in relation to the expected benefit, which will have to be duly justified to the Authority, solutions to guarantee equivalence of treatment in the absence of common tools may be considered, as well as a follow-up of the overall performance of information systems by providing the Authority with a monthly dashboard of relevant indicators. The operator shall propose these indicators to Arcep, which shall take them into account when analysing the use of dispensatory solutions rather than common tools. In this regard, the French Competition Authority, in its opinion No. 20-A-07, *"invites Arcep to perform a strict assessment of this dispensation, as* [simple equivalence of treatment] *is less likely to bring advantages in terms of non-discrimination".*

Development methods

Moreover, the guarantees of non-discrimination will be all the more relevant if they are taken into account as early as possible in the tools' development process. It is therefore essential that the development processes for operators' information systems provide, in the decisions taken by IT development decision-making committees, for an explicit phase of examining the level of guarantee of non-discrimination that the planned solution will enable. When an operator does not choose a common tool as their preferred solution, the use of different tools must be justified and traced back to the development phase so that Arcep can, if necessary, rule on this decision to use different tools.

In addition, when building operators plan IT developments that require commercial operators to carry out specific developments or make changes to their internal processes, the obligation of non-discrimination means that building operators must provide sufficient prior notice so that all operators, including any of the building operator's retail arms, can effectively have access to the tool at the same

time. To this end, the meetings within the Interop'fibre group must be an opportunity to present the new developments necessary for the implementation of a common tool as early on as possible. This group is indeed a privileged setting that enables building operators and commercial operators to meet on a regular basis to develop the protocols and processes necessary for the implementation of access to fibre networks.

Finally, in view of the IT developments necessary for the application of these provisions, the Authority considers that a period of six months from the publication of the present Decision is reasonable for their entry into force.

3.2 Strengthening guarantees on the circulation of information obtained in the context of wholesale access provision

The issue of the circulation of sensitive information, obtained by an operator in the context of an interconnection or access agreement, is a matter of concern for all commercial operators. Such information is likely to constitute a competitive advantage if it is brought to the attention of other economic entities, in particular the retail arm or subsidiaries of the building operator whose business is in competition with the commercial operator.

In particular, as part of their building operator business, vertically integrated operators' wholesale division is required to collect information, in particular relating to civil engineering occupancy, orders for hosting operators' equipment at the remote shared connection point, the number of remote shared connection point links ordered, the rate of supply for buildings' concentration points and subscriber connection, and the number of lines subscribed. This information may, if used for that purpose, enable them to reconstruct, at least partially, the strategies, priorities and commercial footprint of their retail market competitors, as well as their customer market share and share new customer acquisitions. Vertically integrated operators' wholesale divisions must therefore under no circumstances provide this information to their retail arm or to a third-party commercial operator, as specified in CPCE Article D. 99-6[14].

The Authority therefore considers it necessary and proportionate to require building operators to provide, upon request, any useful information so that the Authority can ensure compliance with the obligations set out in CPCE Article D. 99-6. To this end, the Authority is likely to ask operators, in particular those that are vertically integrated, for information on the management, prevention, training and awareness-raising policies put in place regarding the processing of this information.

In its Opinion No. 20-A-07, the Competition Authority states it, " [supports] *Arcep's desire to ensure the effectiveness of* [the obligation set out in CPCE Article D. 99-6], *whether by means of the measure proposed in its symmetrical draft decision, or as the case may be by the investigative powers that it already holds pursuant to CPCE Article L. 32-4* ."

3.3 Non-discrimination guarantees for information systems and business processes for services with increased QoS provided on an adapted FttH architecture

The development of FttH plans for businesses with increased quality of service requires ensuring that the operational processes and information systems put in place by building operators do not impose undue burdens or constraints on third-party operators that would penalise them compared to building operators, when producing activated wholesale and retail offers marketed in downstream markets.

Several building operators that already offer passive access on their FttH infrastructure have chosen to

[14] CPCE Article D. 99-6 provides, inter alia, that: *"Operators in possession of information in the context of the negotiation or implementation of an interconnection or access agreement may use it only for the purposes expressly provided for at the time of its communication. In particular, this information is not communicated to other services, subsidiaries or partners for whom it could constitute a competitive advantage."*

make specific architectural adaptations to this infrastructure for the provision of Level 2 increased quality of service offers. These architectural adaptations induce, first, adapted computer processing, which creates greater opportunities for discrimination in the information systems linked to these offers and, second, the implementation of new operational and technical processes whose implementation method remains adaptable as these are new or net yet developed offers.

Non-discriminatory operational and technical processes are an essential element in maintaining effective and dynamic competition for the benefit of end users. To this end, CPCE Article L. 34-8-3 requires building operators to provide access under non-discriminatory conditions. The Authority thus considers it necessary to put specific non-discrimination guarantees in place for passive access offers with Level 2 increased quality of service provided on adapted FttH networks.

To this end, the equivalence of inputs offers the best guarantees for the effective implementation of non-discriminatory operational and IT processes. By applying that principle, the provision of services, information and quality of service is carried out under the same conditions, at equivalent price levels and within a similar timetable, for all operators, including any marketing arm in the building operator's downstream markets.

In its Opinion No. 20-A-07, the Competition Authority expressed itself in favour of applying an equivalence of inputs to Level 2 increased quality of service offers.

To avoid any risk of discrimination in the information systems and operational and technical processes of these new offers, and thereby address commercial operators' concerns, the Authority considers that it is justified and proportionate to require building operators to provide the prior information and access services for point-to-point offers with a GRT of 4BH/NBH (business hours/non business hours), when they market them on an FttH infrastructure with adaptation, under the same conditions to all operators who market such offers in downstream markets, including any retail arm thereof, which therefore constitutes an implementation of the principle of equivalence of inputs (EoI) on all aspects of such offers. This implementation is justified in the light of the objectives pursued, in particular that of safeguarding fair and effective competition for the benefit of users between network operators and providers of electronic communications services, in particular when they benefit from public subsidies in accordance with Articles 106 and 107 of the Treaty on the Functioning of the European Union referred to in sub-paragraph 1 of Para. III of CPCE Article L. 32-1.

Nevertheless, as far as information systems are concerned, it is possible that, for certain building operators, the IT processes for such offers are, in whole or in part, strongly tied to those already developed for FttH access offers without increased quality of service. A strict application of the principle of equivalence of inputs on this aspect of IT processes could involve fundamentally challenging the IT choices already implemented by these operators for FttH access offers without increased quality of service, and result in disproportionate cost and development time, or too much internal reorganisation, given the guarantees of non-discrimination already provided by the implementation of the "common tools".

For the parts of the information systems of the Level 2 increased quality of service access offers provided on the adapted networks which are strongly tied to those of the FttH access offers without increased quality of service, and only in this case and for those parts, and where the transition to equivalence of inputs would not be reasonable, which will be assessed in particular with regard to technical difficulties leading to a disproportionate cost and development time or internal reorganisations that are too significant in relation to the expected benefit (these difficulties must be duly justified to the Authority), the implementation of the principle of common tools described in 3.1 may be considered as providing sufficient guarantees of non-discrimination.

4 Adaptation of the terms and conditions of access to FttH lines for non-residential uses

The massive deployment of FttH networks began in France around ten years ago, mainly in response to the needs of residential customers. Optical fibre connections were already available to business customers at that time, but by means of dedicated fibre networks, deployed on demand and therefore at significantly higher costs.

Need to impose multiple levels of increased quality of service on FttH networks

As early as 2016, the Authority indicated that it was essential that *"shared optical fibre local loops be able to accommodate all uses that require wireline support* [...]. *In particular, it seems essential that the needs of businesses, characterised by strong requirements on commissioning times, service availability and customer service responsiveness, be covered by offers built on the shared optical fibre local loop"* [15].

In order for companies to benefit from the advantages of FttH networks or migrate their copper access to them, they must be able to access retail market fibre access plans that satisfy all of their needs, which means plans offering different quality of service (QoS) levels. To create such retail offers, however, solutions with QoS guarantees must already exist in the wholesale market for business market operators. Indeed, in the absence of a sufficiently rich and homogeneous catalogue of wholesale offers on the various FttH networks, making it possible to meet the needs of business market operators and to replace, at a comparable level of service and price, the increased quality of service products offered on the copper network, retail operators cannot create all of the FttH plans tailored to the needs of businesses. Some businesses therefore have no choice but to turn to dedicated optical local loop solutions, which are particularly expensive in less densely populated areas, or rely on the copper network, which deprives them of the benefits of using optical fibre.

However, ten years after shared optical fibre infrastructure rollouts began, the Authority notes that wholesale offers with increased quality of service have not emerged spontaneously on all FTTH networks, particularly on certain building operator networks covering a significant number of lines. Added to which the offers, when they exist, sometimes remain heterogeneous or insufficient. Many FttH networks do not have passive wholesale offers with guaranteed recovery time, for instance.

With a view to the legacy copper network's switchoff and thus the disappearance of offers with increased quality of service on this network, it is particularly important that all building operators market wholesale offers with increased quality of service on their FttH network, to promote fair and effective competition for the benefit of businesses and innovation. It is also essential that these offers be available in a uniform manner across the country so that commercial operators can offer them to all of their customers and thereby facilitate businesses' ability to switch to shared optical fibre networks. Commercial operators stressed this point during the public consultation on the assessment of the 2017-2020 round of market analysis, in 11 July 2019. The vast majority of them indicated that they would like to have offers corresponding to several levels of quality of service and in particular, offers with a GRT of 10BH, and offers with a GRT of 4BH/NBH.

In light of the above, the Authority therefore considers it necessary for building operators to offer, in a uniform manner, access terms adapted to non-residential users to enable commercial operators to meet both the general and specific needs of businesses. The Authority considers that it is justified and proportionate to impose two passive access obligations with increased quality of service on all building operators, as set out below, in compliance with the conditions set out in Authority Decision No. 2009-1106, Decision No. 2010-1312 and Decision No. 2015-0776.

This desire is also shared by the French Competition Authority, which states in its opinion No. 20-A-07, "[being] *in favour of the obligation imposed on all building operators to provide wholesale offers with two levels of increased quality of service on the shared optical local loop (SOLL)* [because] *these offers*

[15] Arcep's public consultation of 14 June 2016 on the draft Recommendation on access to ultrafast optical fibre networks with improved quality of service and on the use of surplus fibres.

will allow alternative operators to meet the needs of many companies and therefore to compete with the offers built on dedicated optical local loops (DOLL)".

The Authority wants to ensure that all of businesses' needs are taken into account when deploying FttH networks and developing ordering, delivery and after-sales service processes associated with wholesale offers, guaranteeing better control of production times.

4.1 Obligation to propose an offer with Level 1 increased quality of service on FttH infrastructure

4.1.1 Level 1 increased quality of service

While several building operators already offer 10BH GRT offers in their catalogue, others do not, and it is not certain that they will emerge spontaneously, within a reasonable time, on their networks. Commercial operators nevertheless insist on the need to have offers with such a high level of increased quality of service on all FttH networks in order to offer a "D+1" guarantee of recovery time in the market to satisfy businesses' demand that restoration of their access be a priority.

The Authority thus considers it necessary to impose the implementation of such offers on all FttH networks, in accordance with the terms and conditions set out below.

All building operators must therefore make wholesale offers for passive access to their FttH network available without any architectural adaptation, including a guaranteed recovery time for network failures within 10 working hours. Such an obligation does not appear disproportionate, insofar as these offers are already offered by certain building operators and do not require network adaptation, only an operational organisation that makes it possible to prioritise the handling of network failures.

These passive offers must be able to be supplied on all ultra-fast broadband optical fibre electronic communications lines serving an end user. They must be able to be ordered on any line, whether the commercial operator has co-financed it or leases it, whether it access lines it at the level of the concentration point (CP) or the remote shared connection point (RCP) in less densely populated areas, where applicable, and, finally, regardless of whether it has requested to work as a subcontractor to the building operator, in particular for the creation and management of the terminal connection.

These obligations are justified and proportionate in the light of the objectives mentioned in Article L. 32-1, in particular sub-paragraph 3 of Para. II, and sub-paragraph 1 of Para. III.

4.1.2 After-sales service process

The shared optical local loop is characterised by the existence of several segments of the optical local loop: CP-RSCP (if applicable), CP-OCP and OCP-IOTP. Each of these segments is the responsibility of the building operator. Unlike the copper local loop, third-party interventions at the CP and OCP levels are possible on the shared optical local loop.

The Authority therefore wants to provide a framework in the present Decision for the after-sales service process, and particularly its scope of application. It is possible to conceive of an after-sales service process separated into three network segments, into two network segments or, if necessary, on the RSCP-IOTP segment.

First, the Authority considers that it is reasonable for the offer referred to in 4.1.1 to allow the commercial operator to report a network failure without having to locate it ahead of time as being upstream or downstream from the OCP. In particular, because the OTP is often combined with the IOTP, the commercial operator does not necessarily make a systematic service call for every network failure and may encounter significant difficulties if it has to locate the network failure upstream or downstream from the OCP. This would require the implementation of an appointment scheduling process with end customers, so that the building operator can, if necessary, work on the premises served by the FttH line,

up to the IOTP.

Second, in most cases, operators with passive access to the FttH network have several connections per CP. They therefore seem capable of differentiating remotely (by statistical inference) between a failure on the OCN-CP link and a failure downstream from the CP. In addition, commercial operators have installed their own equipment at the CP (optical fibre drawer, couplers and jumpers) which interrupts the building operator's area of responsibility. It therefore seems reasonable that the process implemented by the building operator consist of having commercial operators report failures either on the OCN-CP segment or downstream from the CP (CP-IOTP segment). It nevertheless also seems reasonable for the building operator to take into account, when assessing penalties for work that caused damages (e.g. slamming), of the case of a commercial operator which, having only one active access line downstream from an CP at a given time, would be unable to perform the statistical inference to report the failure on the correct network segment and would simultaneously report a failure downstream as well as upstream from the CP.

Third, for the sake of operational efficiency (to avoid two service calls that would be detrimental to the objective of restoring service in a timely fashion), it seems reasonable that some commercial operators may wish, in the event of a passive failure between the RSCP and the IOTP, to entrust the building operator with the task of also intervening on the jumpers installed at the CP between the commercial operator's transport drawer and the distribution drawer. Indeed, when a network failure is reported downstream from the CP, the building operator could check that the jumper is properly connected not only to the distribution drawer but also to the commercial operator's transport drawer, and if necessary restore optical continuity between the two drawers (if necessary by means of a new jumper). Such an intervention presupposes that the commercial operator has communicated to the building operator, before or at the time of the service call, the position on its optical drawer to which the faulty access corresponds. The Authority considers it justified and proportionate to require the building operator to grant reasonable requests to intervene on the jumpers made by commercial operators who subscribe to the Level 1 increased quality of service offer referred to in 4.1.1. The building operator is therefore asked to include the work done on the jumpers in the scope of its access offer within a maximum six months from the request.

4.1.3 Penalties

It seems essential to ensure that the building operator complies, first, with delivery deadlines for the various network elements enabling operative access and, second, a guaranteed recovery time, in the event of a network failure, corresponding to the identified Level 1 QoS. To achieve these objectives, the building operator must be incentivised to comply with these deadlines.

It is therefore necessary that service level commitments and guarantees, with associated penalties, exist on the offers that make it possible to meet the provision of the Level 1 increased quality of service. These commitments are described in Section 5.1.

It is up to the building operator to automatically apply penalties for non-compliance with delivery and service restoration times, without these having to be claimed by the commercial operator, as a means of providing guarantees that ensures their effectiveness.

In addition, cases of exemption from compliance with the building operator's recovery time guarantee may exist, if exceptional circumstances preventing it from resolving the network failure are involved and duly justified. For example, penalties may not be due when the interruption of service is due to a case of force majeure.

4.1.4 Implementation time

Nothing seems to stand in the way of the rapid implementation of such quality of service offers, as they do not require network adaptation, only an operational organisation that makes it possible to prioritise the treatment of certain network failures. The Authority therefore considers it justified and proportionate to require all building operators to offer, within a reasonable period of time that may not

exceed three months from the publication of the present Decision, such offers on their FttH infrastructures nationwide.

4.2 Obligation to propose an offer with Level 2 increased quality of service on the shared optical local loop

4.2.1 Level 2 increased quality of service

Several building operators have implemented, only in less densely populated areas and low-density pockets of very high-density areas, wholesale FttH passive access offers that provide a higher level of quality of service, sometimes based on architectural adaptations of their FttH infrastructure, chiefly at the CP (jumper, dedicated drawer) and OCP (company-specific OCP) levels. These offers are generally marketed with a guaranteed recovery time of 4 working hours (hereinafter "GRT 4BH"), or four non-working hours (hereinafter "GRT 4NBH[16]") as an option, and can be delivered, point-to-point, to the CP or RSCP.

Although several building operators do offer this type of SLA in certain parts of the country, others do not, and it is not certain that they will emerge spontaneously, within a reasonable time, on their networks.

According to most commercial operators, however, this level of increased quality of service on FttH networks is crucial to satisfying the specific needs of some business customers who currently have an SDSL connection or access to the dedicated optical local loop for high-quality access at a lower cost.

To meet the specific needs of businesses and ensure effective competition between operators for the provision of ultra-fast broadband services to businesses, the Authority considers it necessary to impose the implementation of such offers on all FTTH networks.

As a reminder, the main means of accessing FttH networks is at the level of the concentration point. Article 3 of Decision No. 2010-1312, specifying the terms and conditions for access to ultra-fast broadband optical fibre electronic communications lines nationwide, with the exception of very high-density areas, provides, first, that when the building operator does not offer a remote connection solution, a concentration point's service area shall include at least a thousand existing households or business premises on the day of its installation and, second, that when the building operator offers a remote connection solution, the concentration point's service area shall include at least 300 existing households or business premises on the day of its installation.

The Authority considers it reasonable for building operators to allow the production and operation of access to an ultra-fast broadband optical fibre electronic communications line establishing point-to-point optical continuity between the delivery point on the operator's side and the IOTP, at the CP in all cases and at the RSCP when the building operator offers a remote connection solution. Such an obligation at the level of the RSCP does not appear disproportionate, as surplus fibres in the CP-RSCP segment have already been deployed by all building operators.

The Authority thus considers that it is justified and proportionate, in particular with regard to the objectives mentioned in Article L. 32-1, in particular sub-paragraph 3 of Para. II, and sub-paragraph 1 of Para. III, for building operators to offer, at the level of the concentration point, for every household or business premises served by an ultra-fast broadband optical fibre electronic communications line that they operate, an offer of access to a line providing for the restoration of service within 4 working hours and non-working hours in the event of an operating incident offers a remote connection offer, it also offers access to the line with increased quality of service at the remote shared connection point.

In addition, several of the building operators that already offer GRT 4H BH/NBH[17] on their FttH

[16] Non-working hours: 24/7

[17] Non-working hours: 24/7

infrastructure have chosen to make specific architectural adaptations to this infrastructure for the provision of these offers. The Authority does not intend to require operators to implement architectural adaptations in order to provide a solution that meets the obligation of providing Level 2 increased quality of service set out above.

4.2.2 Possibility of a specific architecture to meet increased QoS needs

Several of the building operators that already offer GRT 4H BH/NBH on their FttH infrastructure have chosen to make specific architectural adaptations to provide these offers on this infrastructure, which may lead to significant differences in terms of access conditions.

The adaptations of the FttH architecture, most of which are described in the FttH Local Loop Experts Committee Compendium of operational and technical specifications[18], may be characterised in particular by:

- security at the concentration point level characterised by the installation of dedicated optical fibre drawer and by the use of secure jumpers at the CP;
- security at the level of the optical connection point (OCP) installed on power poles for FttH lines, characterised by the creation of dedicated OCP for business customers in addition to the standard FTTH network architecture's connection point for a given premises;
- the ability to deliver access over a pigtail[19] rather than a OTP;
- a multi-fibre end-connect cable between the OCP and the OTP or the pigtail.

These architectural adaptations can be accompanied by adapted processes. For example, with regard to the delivery of access, a building operator that has chosen a business-specific OCP in its architecture makes its installation conditional on the first order from a commercial operator. This building operator has thus implemented the "connectable on demand" mechanism in a systematic and sustainable way for these connection points.

It seems reasonable that a building operator could choose to make architectural adaptations to its FttH network to meet a significant operational need, such as reducing the failure rate or repair time. These adaptations must not, however, lead it to renege on its obligations on shared optical networks.

4.2.3 Access line production

The production of the terminal connection for point-to-point access offers, including a guaranteed service recovery time of 4 working hours and, optionally, 4 non-working hours, provided on FttH networks must take into account all the specificities of the delivery of a connection that is marketed as "premium," and must satisfy business customers' requirements. These specificities do not, however, exist in the production of standard FttH access for consumer market customers.

Operators' responses to the public consultation of 6 February 2020 indicate that most of the terminal connections for these offers will, at least initially, be made by the building operator. Article 17 of Decision No. 2015-0776 also requires building operators to include *"a service for the construction of the terminal connection at the request of a commercial operator"* in their access offers.

To offer access that is likely to meet the needs of business customers in terms of quality of access line production, in the terminal connection solution included in its access offer, the building operator shall provide for:

- the various operational arrangements to meet these customers' needs, such as managing customer work and setting up technical service calls;

[18] Compendium of functional and technical specifications for fibre-to-the-home networks outside very high-density areas – FttH Local Loop Experts Committee, dated 2 September 2019 (known as "V7") (pp. 33-37)

[19] Equipment marking the termination of an optical cable, for all or part of its capacity, by means of a connector per fibre used.

- a standard production time of no more than 45 working days, which appears reasonable in view of the state of the art in the high-quality access market.

The Authority thus considers it justified and proportionate, particularly with regard to the objectives mentioned in Article L. 32-1, in particular sub-paragraph 3 of Para. II, and sub-paragraph 1 of Para. III, to impose on building operators an obligation to take into account, for point-to-point solutions including a guaranteed service recovery time of 4 working hours and, optionally, 4 non-working hours, business customers' access line production quality requirements when it is responsible for the construction of the terminal connection.

4.2.4 Penalties

It seems vital to ensure that the building operator complies, first, with the delivery deadlines for the various network elements allowing operative access and, second, with service recovery times, in the event of a network incident, corresponding to the second level of quality of service identified. To achieve these objectives, the building operator must be incentivised to comply with these deadlines.

Under these conditions, it is necessary that service level commitments and guarantees, with associated penalties, exist in the offers that make it possible to provide the Level 2 increased quality of service. These commitments are described in Section 5.1.

It is up to the building operator to automatically apply penalties for non-compliance with delivery and restoration deadlines, without these having to be claimed by the commercial operator, as a means of providing guarantees that ensures their effectiveness.

In addition, cases of a building operator's exemption from compliance with guaranteed recovery times may exist, if exceptional circumstances that prevent it from resolving the network failure are involved in the restoration process and are duly justified. For example, penalties may not be due when the service interruption is the result of a case of force majeure.

4.2.5 Implementation time

Building operators wanting to offer Level 2 increased quality of service as an option on their FttH infrastructure, without adapting that infrastructure, should not encounter any obstacles in implementing such QoS options, as they do not require any network adaptations, only an operational organisation that makes it possible to prioritise the treatment of certain network failures. The Authority therefore intends to stipulated a period of three months from the publication of the present Decision for these offers to become commercially available.

When building operators choose to adapt their FttH infrastructure to market plans with a GRT 4BH/NBH on that infrastructure, the work that may be required to adapt the existing FttH infrastructure may prove an impediment to the rapid introduction of these plans with increased QoS. The Authority nevertheless concludes that it is possible to carry out this work in "reactive" mode, which consists of making the building operator's entire network commercially available, and only performing adaptation work when a commercial operator places an order, and which certain operators have implemented. These operating method creates the ability to meet prior notice periods more easily, and is compatible with the aforementioned three-month deadline.

To perform the work that may be need to adapt the existing FttH infrastructure, upon receipt of access orders, it seems reasonable that building operators be able, during a transitional period of 21 months from the present Decision's entry into force, to be given longer deadlines than the standard line production deadline – and which are proportionate to the scale of the adaptation required – for lines that require significant architectural adaptations such as the redeployment of OCN-CP links or the installation of a dedicated installation point.

Lastly, according to stakeholders' feedback to the public consultation, commercial operators appetite for plans with Level 2 increased QoS seems less certain in very high-density area, outside of low-density

pockets. As a result, in these areas, the Authority considers it justified and proportionate to impose that all building operators only be required to market such an offer on their FttH infrastructures in response to a request from a commercial operator for these offer, within a reasonable timeframe that must not exceed six months from the request.

5 Quality of service on FttH networks

This section deals with quality of service issues for the various access offers provided by building operators on the shared optical local loop.

Article L. 34-8-3 of the French Postal and Electronic Communications Code (CPCE) provides that *"in order to achieve the objectives defined in Article L. 32-1,* [...]*, the Authority may specify, in an objective, transparent, non-discriminatory and proportionate manner, the terms and conditions of the access provided for in this Article."*

The Authority considers it necessary to specify quality of service requirements to ensure effective and non-discriminatory access to ultra-fast broadband optical fibre lines.

Fibre access offers are becoming particularly important at a time when, in the retail market, the transition is now clearly underway from offers based on the legacy copper local loop network and those based on the shared optical local loop.

Commercial operators' ability to provide decent quality of service levels (delivery time, repair time in the event of a network failure, network failure recurrence rate, etc.) is a decisive aspect of their offer, and therefore of end users' choice. While the quality of service of the downstream offers marketed by alternative operators depends on the quality of their own services, it also depends on the quality of the wholesale offers purchased from the building operators on which they are built.

First, it appears that a situation in which the building operator does not ensure a level of quality of service for wholesale offers compatible with the requirements of operators marketing downstream plans based on these wholesale offers could, in the coming years, weaken the incentive for end users to switch to shared optical fibre networks and, subsequently, when the optical fibre network is the reference fixed network handling a large percentage of traffic, it will be detrimental to both commercial operators and the end users who will depend on it, in the absence of an equivalent alternative fixed network.

Furthermore, the building operator's compliance with its obligation to grant reasonable requests for access must be assessed in particular in the light of the quality of service provided by the latter, notably through the access line delivery and recovery components. A quality of service that would result in overly long delivery or recovery times cannot be regarded as compatible with operators' and their end customers' expectations, and therefore with the provision of operative access.

Finally, commercial operators must have access, under non-discriminatory conditions, to a quality of service comparable to the risk of significant competitive disadvantage.

In the light of all the foregoing elements, it seems relevant that building operators:

- commit to quality of service levels (**section 5.1**);
- comply with quantified quality of service thresholds (**section 5.2**);
- publish quality of service indicators (**section 5.3**).

The definition of the indicators and the associated quality of service levels and thresholds were the subject of specific collaborative work between the affected operators, which took the form of a working group dedicated to FttH network quality of service and bilateral preparatory meetings.

The definition of and calculation method for these indicators are intended to be refined over the course of multilateral work, drawing in particular on the work of the Interop'fibre group, to establish definitions for operational and common indicators, based, for example, on standardised information exchange

flows, to be able to measure them in a homogeneous and systematic manner.

The Authority also plans for the production of a progress report involving operators, at its own initiative, when quantified quality of service thresholds come into force, at which point an analysis can be conducted of the relevance of the levels detailed below, notably with respect to deployment progress and the data that will be available. If necessary, this analysis could lead the Authority to amend these provisions, on the basis of a subsequent decision.

In its Opinion No. 20-A-07, the French Competition Authority states that it agrees with Arcep's analysis, and, *"considers that Arcep's quality of service measurement and compliance monitoring are essential in light of the forthcoming switchoff of the copper network* [both for the incumbent carrier] *and for all other FttH building operators, due to the control they enjoy over their downstream network at the concentration point"* and *"welcomes the introduction of a quality of service obligations mechanism (quantified thresholds, contractual commitments with penalties and publication of indicators) applicable to all building operators marketing FttH offers on the shared optical local loop".*

5.1 Contractual commitments to client operators and associated penalty mechanism

Need for a contractual penalty mechanism for the building operator

The efficiency of operational processes must be accompanied by pricing principles that encourage every party to detect and process as quickly and under the best possible conditions what is within its remit.

To this end, it seems necessary, first, for building operators to commit to service levels vis-à-vis client operators in their reference offers for shared optical local loop access and, second, for them to be financially incentivised to comply with these commitments. This applies to both non-increased QoS and increased QoS as defined in Sections **4.1** and **4.2**.

In practice, this system places a limited constraint on building operators. These types of commitments are consistent with common business practices in competitive markets.

These mechanisms already exist in most building operators' current reference offers, and penalties are payable by building operators in the event of their non-compliance with their quality of service commitments, in particular in the event of late delivery of access lines, late processing of an order, a network failure or an after-sales service.

The Authority will continue to ensure that the level of penalties and their implementation methods proposed by building operators in their reference offers are sufficiently dissuasive to ensure that building operators comply with their supply obligations, and in particular their quality of service level commitments on access line production time and after-sales service. Since the purpose of this mechanism is to ensure the provision of operative access to the networks, it should be recalled that in the event of a breach of a contractual commitment, the payment of penalties must not, where appropriate, release the building operator from that commitment.

It is therefore important that building operators implement the necessary means to meet their commitments, in a non-discriminatory manner, and without the need for commercial operators to use additional commercial services. Finally, the level of penalties proposed by the building operator must be proportionate to the scale, particularly in terms of time, of the observed breaches of the reference offer's terms and conditions. The services that must carry, at the very least, commitments and penalties for non-compliance with these commitments are specified in Annex 1.

Conditions for the application of building operators' penalties on commercial operators

The building operator may also impose penalties on commercial operators in the event of poor quality of the information transmitted. Nevertheless, to ensure that commercial operators can verify the validity of the penalties that would be applied to them, and improve their processes in order to avoid them, it seems justified that penalty mechanisms adhere to following principles:

- the penalties included in the reference offer shall be accompanied by a detailed description of the conditions under which these penalties apply, and the associated amounts, in order to limit differences of interpretation between operators;
- the amounts of these penalties shall not be disproportionate;
- the building operator shall give the commercial operator access to the information and tools that it would be reasonable to provide to avoid the breach of contract giving rise to the penalty;
- any penalty charged by the building operator shall specify the order in question and shall give rise to a systematic and reasoned justification;
- any refusal by the building operator of a deliverable from the commercial operator shall give rise to a complete and detailed inventory of the shortcomings or errors observed;
- the building operator shall promptly notify the relevant commercial operators of the penalties, giving them the opportunity to contest them if necessary;
- the payment of these penalties shall be made between the operators without undue delay following a predefined invoicing and payment process.

There is nothing to prevent the rapid implementation of such a penalty mechanism in existing reference offers for FttH access lines, with and without increased quality of service, which is why a period of three months from the publication of the present Decision seems proportionate.

5.2 Obligation to comply with quantified thresholds

In view of the concerns expressed above, and in accordance with the above-mentioned provisions, Arcep intends to define, by indicator, the quality of service thresholds to ensure operative access to the shared optical local loop, for offers with and without increased quality of service.

The thresholds relate to compliance, on a quarterly basis, with values for indicators pertaining, on the one hand, to all access offers (section 5.2.1) and, on the other, more specifically to access offers with increased quality of service (section 5.2.2) on the shared optical local loop.

The indicators corresponding to these thresholds are presented and assessed on the scale of every building operator. For building operators that are present in both very high-density and less densely populated areas, they are assessed at the scale of very high-density areas, on the one hand, and at the scale of less densely populated areas, on the other.

5.2.1 Indicators and thresholds common to all access offers

A minimum quality of service threshold for the deadline for making optical routes available[20] was already imposed in Article 10 of Decision No. 2015-0776. In addition, to ensure operative access to ultra-fast broadband optical fibre lines, the Authority intends to define quality of service thresholds on categories of indicators, with which building operators must comply on a quarterly basis.

It seems reasonable and proportionate to define a limited number of thresholds, linked to indicators to track a building operator’s production and after-sales service performance. The defined thresholds and indicators take into account the existence of different management methods in the production of FttH access and particularly the fact that, in the majority of access lines produced to date, it is the commercial operator that ensures their production on behalf of the building operator (commercial operator subcontracting arrangements known as “STOC” in French).

For the new indicators being monitored, a gradual entry into force of the QoS thresholds to be achieved by building operators also appears reasonable and proportionate. This means taking into account the fact that FttH network rollouts are still underway, and that a significant proportion of operators' human and financial resources continue to be earmarked for this purpose. Moreover, in the light of operators'

[20] Maximum time between the access order and the access order report

responses to the first public consultation, it appears that a period of two years from the publication of the present Decision before the entry into force of the QoS thresholds to be achieved seems reasonable. The Authority also considers it appropriate to define an enforcement milestone that would see a given co-financing area included in the assessment with regard to the thresholds, once the FttH deployment level exceeds 80% of the premises in this co-financing area and the number of active routes exceeds 30% of the premises.

Such a mechanism makes it possible to ensure the reasonable and proportionate nature of this obligation, by taking into account a reallocation over time of the operators' resources from deployments to operation and quality of service on FttH networks.

For the indicators common to all access lines, the Authority also stipulates that quality of service shall be assessed globally on sets of indicators relating to production, on the one hand, and to after-sales service on the other, based on the results achieved on all the indicators for the various thresholds, and this on a quarterly basis. This mechanism, which stakeholders welcomed in their responses to the public consultation, is defined in detail in Annex 2 to the present Decision.

The associated indicators and thresholds are defined in **Annex 2**.

5.2.2 Specific additional indicators and thresholds for access offers with increased QoS

The obligations to provide passive access with increased quality of service on the shared optical local loop, specified in sections **4.1** and **4.2**, have been defined above all in terms of speed of service restoration to meet non-residential customers' demanding requirements. The production quality of these access lines are also an important part of these clientele's expectations.

To ensure operative access to increased quality of service offers and to guarantee a quality of production and after-sales service for access lines with increased quality of service, Arcep thus considers it justified and proportionate to define indicators in addition to those that are common to all access offers, which building operators will have to calculate as of the publication of the present Decision, along with specific associated thresholds.

In particular, the Authority intends to define thresholds for indicators such as the rate of compliance with the contractual dates for the production of access lines and the rate of compliance with guaranteed recovery times.

Also, particularly with regard to the operators' responses to the public consultations, it appears that a period of two years from the publication of the present Decision is needed before the quality of service thresholds' entry into force, to give offers with increased quality of service time to develop.

The associated indicators and thresholds are detailed in **Annex 2**.

5.2.3 Keeping the Authority informed

To ensure that compliance with the quantified QoS thresholds is verified on a quarterly basis, building operators are required to submit monthly and quarterly values for the indicators to Arcep, in a format specified by the Authority in Annex 2, for every offer that meets the obligations to provide passive access with and without increased quality of service on the shared optical local loop.

Moreover, it also seems reasonable and proportionate that this submission should take place even before the associated quality of service thresholds enter into force, to inform the analysis that will be carried out for the progress mentioned in the introduction to this section.

For the reasons set out above, it appears proportionate that the building operator implement the first submission of the above-mentioned elements three months from the publication of the Decision, at the latest.

5.3 Publication of QoS indicators

It seems justified to ask all building operators to measure on a monthly basis, and to publish and transmit to the Authority with the same frequency, in a format that enables easy reuse of the data, the values of the QoS indicators specified in **Annex 3**, on the scale of the assessment defined by the Authority (section 5.2.1) and at the building operator level, for all the wholesale offers for passive access to the shared optical local loop that they market, in a digital spreadsheet file format.

The process of obtaining measurements and the periodic publication of several monitoring indicators make it possible to ensure that there are no discriminatory practices, and to give end customers in particular the opportunity to assess the respective responsibilities of building operators and the commercial operators serving customers in ensuring retail offers' QoS. Moreover, the collection of the information needed to establish indicators in building operators' information and management systems, or that of or their subcontractors, does not seem to present any particular difficulty.

The publication of service level indicators, and their transmission to the Authority, in a format that enables easy reuse of the data and which the Authority will specify, is to be considered a proportionate obligation, in particular with regard to sub-paragraph 1 and sub-paragraph 3 of Para. III of CPCE Article L. 32-1.

In the event of that building operators introduce a new wholesale offers, they will also be subject to this obligation to publish quality of service indicators as soon as they are marketed, unless expressly exempted by the Authority.
It seems proportionate to give building operators sufficient time to organise the measurement of quality of service indicators. To this end, a period of six months from the publication of the present Decision seems reasonable.

6 Clarification of reporting obligations

Arcep Decisions Nos. 2009-1106 and 2010-1312 introduced an obligation to account for the costs of shared FttH networks to enable the Authority to monitor pricing obligations for access to these networks provided for by these same decisions, pursuant to CPCE Article L. 34-8-3.

Given the rapid development of these networks, it is useful to specify these obligations to enable this monitoring to be carried out under good conditions. The present Decision thus clarifies the reporting obligations applicable to operators establishing, having established or operating FttH local loops.

After providing some background (**section 6.1**), the purpose and scope of the obligation are specified (**section 6.2**), as are the information to be kept up to date by operators (**section 6.3**), the reporting and monitoring procedures (**section 6.4**) as well as the adjustments provided for certain types of operator (**section 6.5**).

6.1 Background

6.1.1 Framework applicable to FttH network pricing

In accordance with Article L. 34-8-3 of the French Postal and Electronic Communications Code (CPCE), pricing conditions for access to FttH[21] infrastructure must be reasonable.

Decisions taken pursuant to this Article, namely the above-mentioned Decisions No. 2009-1106 and No. 2010-1312, have clarified the pricing conditions for access to the concentration point. Article 3 of Decision No. 2009-1106 and Article 9 of Decision No. 2010-1312 specify that the pricing conditions for access must be reasonable and comply with the principles of non-discrimination, objectivity, relevance and efficiency.

In particular, the principle of objectivity implies that the pricing implemented by the operator must be substantiated based on clear and legally binding cost elements,[22] and the principle of relevance that the costs must be borne by the operators that induce them or use the corresponding infrastructures or

[21] Here and in the following, the term FttH infrastructures or networks refers to all FttH architectures, with or without adaptation (shared optical local loop)

services[23].

6.1.2 Implementation of accounting monitoring of FttH networks

In view of the pricing principles applicable to FttH network access, the introduction of a cost accounting system for operators establishing, having established or operating FttH lines is an essential tool for monitoring the pricing of FttH network access.

This is why, already in the above-mentioned 2009 Decision, the Authority specified[22] that the building (aka infrastructure) operator must establish cost-related information and keep it up to date, tracing the investments made and presenting a sufficient degree of detail to enable the Authority to monitor the pricing obligations incumbent on that operator.

The rise of FttH networks has led the Authority to specify the accounting obligations applicable to these operators. In recent years, the Authority has carried out preliminary work to define an accounting nomenclature for this purpose. In its Decision No. 2017-1347 of 14 December 2017[23], the Authority stated that "*the Authority intends to publish, before the end of this round of market analysis, a document defining the specifications for the reporting of cost and revenue accounting that operators deploying ultra-fast broadband optical fibre networks must make available to the Authority.*

The existence of accounting obligations is particularly important as, once Orange's copper network is switched off, building operators' FttH networks will become indispensable. This is why it is crucial that we equip ourselves now with the tools to ensure that the operators concerned do not one day take undue advantage of this particular position."

The Authority has also launched a study on the specificities of accounting of public-initiative networks (PIN) establishing, having established or operating fibre-to-the-home networks.

6.2 Purpose and scope

The purpose of the present Decision is to specify the reporting obligations applicable to entities establishing, having established or operating FttH networks to serve an end user (hereinafter referred to simply as "operators"). It specifies the accounting information that operators must keep up to date, in accordance with a uniform framework, as well as reporting and monitoring methods.

The Decision applies to all operators.

However, appropriate arrangements, described in section 6.5, are provided for public initiative networks, on the one hand, and small networks on the other.

6.3 Accounting information to be kept up to date by operators

This section specifies the accounting information that operators must keep up to date.

6.3.1 Scope, segmentation and granularity

Scope

The scope of the operator's reporting of costs and revenues under the present Decision corresponds to the operator's FttH networks to which it is required to provide access in accordance with CPCE Article L. 34-8-3.

This scope therefore includes:

- for very high-density areas: the operator's entire network downstream from the concentration point (included);
- for less densely populated areas: the operator's entire network downstream from the optical

[22] Decision No. 2009-1106, Article 4

[23] Decision No 2017-1347 of 14 December 2017 on the definition of the relevant market for the wholesale provision of local access at a fixed location, on the designation of an operator exercising significant influence on that market and on the obligations imposed on that operator on that market.

connection node (including hosting); the building operator is in fact required to provide access to the concentration point, or to the RCP when the concentration point includes fewer than 1,000 premises. In practice, the CPs serve fewer than 1,000 premises, and access is provided at the RCP, in practice located at the OCN.

Segmentation by area

- In order to be usable for the purpose mentioned in Section 6.1, i.e. monitoring of the pricing terms and conditions applied by building operators, the information kept up to date by the operator must be sufficiently detailed[24].
- To this end, all the accounting information kept up to date by the operator be distinguished, first, by area[25]:
- very high-density areas;
- less densely populated areas.

Operators' pricing terms and reference offers can vary according to these areas. It is therefore essential that the different information be distinguished according to these areas.

Segmentation by network segment

The different pieces of information will then be segmented, for each of these areas, between local loop's different network segments:

- hosting at the OCN;
- transport (OCN-CP link);
- distribution (CP-OCP link);
- terminal connection (OCP-OTP link).

This segmentation is necessary and proportionate for the purposes of monitoring pricing obligations, as building operators market their offers to commercial operators according to these different segments.

It is specified that:

- although some prices are linked solely to the use of the CP, it is not required to provide a separate accounting of concentration point costs and revenues as these services seem to have limited economic weight. The costs related to the concentration point will thus be included in the distribution segment (CP-OCP).
- as mentioned above, in the case of the very high-density area, operators are not required to provide an accounting of the "hosting" and "transport" segments.

Granularity

Within these accounting levels (area and by network segment within each area), a more granular level of detail is expected, as set out below. The granularity of the requested accounting information is required to monitor pricing conditions for FttH network access, and particularly compliance with the principles of relevance and objectivity referred to above.

6.3.2 Information that operators must keep up to date

This section details the various types of information that the operator must keep up to date in application of the present Decision.

Deployment and operating expenditures

The operator is requested, first, to keep up-to-date accounts of FttH deployment expenditures and, second, operating expenditures. These are commonly referred to as CAPEX (Capital Expenditure) and OPEX (Operating Expenditure).

[24] Cf. Decision No. 2009-1106, Article 4

[25] Cf. Decisions No. 2009-1106, No. 2013-1475 and No. 2010-1312

The establishment and maintenance of this information is needed to verify the reasonable nature of the building operator's pricing, and in particular compliance with the principles of relevance and objectivity. The information shall be kept up to date according to the format and methodological details mentioned in Annex 4, sections 3 and 5. In particular, it is specified that:

- expenditures to be taken into account are only expenses of an operational nature; expenses of a financial nature and corporate taxes are excluded;
- regarding deployment CAPEX, accounting shall be for annual expenditures (depreciation is not included here);
- operating expenditures are disbursable expenses (excluding provisions, for instance).

Within every area and network segment, deployment expenditures will be distinguished by asset class, including:

(i) standard architecture assets, distinguishing: civil engineering[26]; cables; other assets;

(ii) specific assets, linked to network architectures specific to certain offers (e.g. offers with adaptation for increased quality of service).

Deployment expenditure accounting must present all of the assets, regardless pf whether they are used in whole or in part for FttH networks. This is the case, for example, for civil engineering, which can be used for other unregulated uses. Accounts provided of the network uses described below (see paragraph “How the different offers use of the network”) will make it possible to determine the share attributable to the FttH network. The investment expenditure presented must therefore not be the result of an allocation according to use, as these uses may vary over time.

As regards operating expenses, within every area and segment, these will be distinguished first between (i) network-related expenses in general and (ii) expenses that the operator can attribute to offers, in particular marketing and delivery, on the one hand, and after-sales service, on the other. Such a distinction is intended, in accordance with the principles of relevance and causality, to account for different costs for offers that may utilise the same network, but employ more human resources or even dedicated resources, for instance.

Further details on the requested segmentations can be found in Annex 4, Sections 3 and 5.

Information regarding related parties

Some operators may benefit from contractual relationships with enterprises belonging to the same corporate group, or more generally with “related parties” (e.g. as defined in IAS 24 – *Information on related parties*), for network construction or operation.

Further details on the requested segmentations can be found in Annex 4, Sections 3 and 5.

It is important that sufficient information on this situation be kept up to date, in accordance with the present Decision. This Decision is therefore based on IFRS accounting standards. IAS 24 states, in the section on “*Related party disclosures”,* that: “*Related parties may undertake transactions that unrelated parties would not undertake. For example, an entity that sells goods to its parent company at cost may not sell them on these terms to another customer. Transactions between related parties may also not be made for the same amounts as transactions between unrelated parties ... For these reasons, knowledge of an entity's related party relationships, transactions and balances, including liabilities, may affect the valuation of its activities by users of the financial statements, including the assessment of the risks and opportunities experienced by the entity”.* IAS 24 then lists various disclosures that must be provided by the entity presenting its accounts in this instance.

Similarly, under the present Decision, sufficient information must be provided. At a minimum,

[26] In the case of Orange, in view of the existence of a regulated supply of access to civil engineering and the maintenance of protocols pursuant to market analysis decision 3a, for the use of civil engineering subject to these protocols, Orange will provide an reporting of that use as an operating expenditure at the corresponding price: this civil engineering will thus not be listed as an investment.

information on both deployment and operating expenditures will specify the share that is spent with related parties. In this case, the reference provided for in section 6.3.6 will also specify the corresponding related parties and the nature of the shareholder and contractual relationships between the operator and these related parties. The Authority may ask the operator for clarification on this subject, in particular on the technical and pricing conditions of the contracts governing the deployment or operation of the FTTH network.

Revenue

The operator must then keep up to date a record of the revenues it generates through direct or indirect, partial or total use of the submitted cost elements.

An exhaustive reporting of the operator's revenue will be provided, regardless of its accounting qualification (turnover, other operating revenue, deferred revenue, deduction of fixed assets, etc.). It is crucial that the Authority be able to compare the network costs and the revenues derived from the network in a homogeneous manner. The scope of revenue statements must therefore be consistent with the scope of costs (both investment and operating).

A report shall be provided of all revenues attributable, in terms of causality (see the principles described in section 6.3.5), to the network elements whose costs shall be detailed, regardless of whether they are regulated offers (e.g. leasing the operator’s civil engineering to third parties) and whether it is principal revenue or revenue from ancillary network access services (service access fees, options, etc.). This is essential for verifying that the pricing complies with the applicable principles, in particular the principle of relevance, which implies that the costs must be borne by the uses that induce them.

In terms of segmentation, revenues will be distinguished, within every area:

- first, by network segment. In the case of offers using several network segments, the revenues will be broken down between the network segments via a key that complies with the principles set out in the present Decision;
- second, by offer.

In both cases, revenues will also be distinguished between recurring and non-recurring.

Reporting internal revenues

The principles set out above are those that apply to an operator earning revenue only from passive line access to its FttH network.

An operator generating revenue through the sale of retail offers or activated wholesale offers using that network, is required to keep up to date not those revenues but the revenues that it would have earned, as a building operator providing passive access to the FttH network under the conditions offered to third-party operators, from the sale to a third-party operator of the service needed to provide the same retail or wholesale activated offers in the same quantities and under the same conditions.

The operator shall therefore report these “internal” revenues, based on a simulation of (i) passive offers to be used and (ii) quantities of passive offers to be consumed. These internal revenues will be distinguished from real external revenue. The information will be kept up to date according to the format and methodological stipulations mentioned in Annex 4, section 6.

Physical description of the network (work units)

In addition to reporting expenses and revenues, the operator will also keep an up-to-date physical description of the network.

The operator thus keeps an up-to-date description of the network's work units. This provides a description of the network, whose costs are reported. In particular, it must make it possible to verify the consistency of the reported expenditures. It should also enable the Authority to assess compliance with the principle of efficiency, which states that the costs taken into account must correspond to those

incurred by an efficient operator[27].

Finally, this data may be used by the Authority to assess the costs of the network in the event of missing or manifestly inconsistent cost data.

In particular, the reported data must enable a comparison, for those that have an equivalent, with the data in the "EPI" files.

Use of the network via different offers

The operator also keeps an up-to-date description of the use of the network's assets, broken down by the different offers. Knowledge of how network assets are consumed by the offers forms the basis of all regulatory accounting and enables concrete verification of the application of the principle of causality as well as the principle of relevance, which states that the costs must be borne by the operators that induce them or use the corresponding infrastructures or services.

All the uses of every network element (civil engineering, cable, etc.) must therefore be reported, whether the use is regulated or not. This exhaustiveness is necessary in order to comply with the principles of objectivity and relevance: regulated offers cannot bear all the costs of an asset if the same asset is used elsewhere for other purposes.

This principle is consistent with that of the reporting of revenue, where all turnover attributable to a reported cost item must be reported.

Allocation keys used

The information kept up to date must come, as much as possible, directly from the operator's cost accounting. Despite the operator's efforts, some of the information to be kept up to date may, however, not be available directly from the operator's cost accounting items. In this case, some items in the previous records may come from cost allocations, using allocation keys, as is commonly practiced in regulatory accounting.

A catalogue of allocation keys is then kept up to date by the operator, showing the allocation keys used and the associated methodological elements. This enables the Authority to examine the relevance of the allocations made, and more generally to better understand the meaning of the elements reported by operators when they come from allocations. The allocation keys used must be compatible with the principle of relevance, which implies that the costs must be borne by the operators that induce them, and the principle of non-discrimination. They must also be compatible with the principle of causality (see section 6.3.5 below).

To ensure compliance with the aforementioned principles, however, the operator must take the necessary steps to maintain cost accounting that enables the relevant monitoring of incurred costs, and to use allocations only when strictly necessary.

Network acquisition and disposal operations

Given the fact that FttH networks are built to last for many years and the intertemporal nature of the pricing models generally used (see section 6.3.5 "Reflecting the reality of the operator's expenses and revenues"), the acquisition and disposal of assets must be traced correctly to avoid compromising the Authority's ability to carry out long-term monitoring of the reasonable nature of the rates under good conditions.

The disposal (aka sale) of network assets has consequences for cost monitoring of costs with a view to price supervision perspective, on the part of both the seller and the buyer.

On the seller's side, a disposal of assets gives rise to proceeds from the sale. In addition, the scope of the regulated network may decrease following this sale, modifying the scope of costs to which revenues can be compared.

On the buyer's side, the purchase price could be unrelated to construction costs. However, the principle

[27] Decision No. 2009-1106, page 28

of efficiency requires that the costs taken into account in the assessment of the reasonable nature of prices correspond to those incurred by an efficient operator. For this reason, it is important to be able to distinguish between acquisitions of network assets already deployed by another operator and actual deployment expenses.

Operators are thus requested, first, to retrace, in a separate tab[28], every network acquisition or transfer transaction, presenting the characteristics of the transaction, the description and work units of the network elements acquired or transferred, as well as the corresponding book values (gross and net).

It is then necessary to distinguish between the situation of the transferring operator and that of the acquiring operator.

Selling operator

In the event of a partial disposal of network assets, the operator continues to offer access to a network whose scope has been reduced. However, in accordance with the principle of relevance, it is necessary that the operator's revenues be comparable to a homogeneous scope of costs.

Reporting kept up to date by the operator after this disposal must therefore correspond to the scope of the remaining network it owns, as regards the investment chronicle as well as the other chronicles that are kept up to date.

In addition, at the time of the disposal, the transferring operator must provide the Authority with the relevant pathway information enabling the latter to understand the terms and conditions of the division made by the transferring operator between the retained assets and the transferred assets.

As a result, at the time of the first reporting provided to the Authority following this transfer, the operator will provide the Authority with two submissions: the reporting corresponding to the retained assets, and the reporting corresponding to the transferred assets. For every item reported, the sum of this item between the reporting of the retained assets on the one hand and the transferred assets on the other hand shall be consistent with the value of the item in the previously updated reporting relating to the perimeter comprising both the transferred assets and the retained assets. Moreover, this “division” can, in some cases, involve methodological choices or cost or revenue allocations.

In this case, the terms and conditions of these allowances will be documented and provided to the Authority.

In the event of a total transfer of the network, the operator will produce a version of the reporting including the year of the total transfer of the network, which will be sent to the Authority under the same conditions as the submissions of previous years.

Finally, whether it is a partial or total transfer, the operator will provide the Authority with a tab detailing, chronologically, the assets sold, expressed in gross book value.

Acquiring operator

As indicated above, the purchase price of network elements from another operator is not necessarily a relevant cost for the supervision of the acquiring operator's prices

For these reasons, it is relevant and recommended that in the case of such a transaction, the acquiring operator ensure that it obtains from the transferring operator, at the time of the transaction, the accounting information kept up to date by the transferring operator concerning the transferred assets. This accounting information shall be consistent with the breakdown carried out by the transferring operator in accordance with the procedures set out above, which is also the subject of a transmission to Arcep by the latter.

In the case of a total disposal, the relevant accounting information therefore corresponds to all the information kept up to date by the seller. In the case of a partial disposal, this is information relating to

[28] The information is kept up to date in spreadsheet format, see section 6.3.4

the perimeter that has not been kept by the transferring operator.

Flows relating to resale rights

Finally, the operator will keep an up-to-date table of the resale rights received and paid. 'Resale rights' means any financial transfer system between operators that are clients of the building operator (including itself, although there is no cash flow, for internal sales) set up or managed by the building operator. Such resale rights exist in the reference offers of operators, for example: (i) in the context of co-financing on the OCN-CP and CP-OCP segments or (ii) in the case of churn on the terminal connection, when a customer switches operator. They are part of the operator's pricing, for amounts that can be significant, which makes monitoring necessary for price supervision.

6.3.3 Time grid, frequency and time frame for updating

Time grid

The information described in the previous section shall be kept up to date in the form of annual chronicle. The information is thus kept up to date in the form of tables, presenting the various information items (rows) and years (columns). The years in question correspond to the fiscal years of the legal entity maintaining these accounts.

An exception to this rule is information relating to acquisition/disposal operations: one column is kept up to date per transaction (in chronological order), regardless of their frequency.

In accordance with what is specified in section 6.3.5 on the intertemporal assessment of the link between the operator's costs and revenues, and in particular with a view to verifying that the pricing charged is reasonable and complies with the principles of relevance and objectivity, the chronicle begins with the first deployments of FttH infrastructure. To use a format that is consistent across all operators, the grid will contain one “before 2006” column, followed by one column per year starting in 2006.

Production frequency and deadlines

Operators shall produce a dataset every year containing all the information listed in 6.3.2 as well as the documentation referred to in section 6.3.6, following the closure of every fiscal year. The dataset produced for the fiscal year of year N contains the annual chronicles up to and including year N. It shall be produced by the end of the 7th month following the end of that fiscal year at the latest.

Operators maintain one dataset per fiscal year. If, during the production of the data in the year N, an error is detected on the data produced in the year N-1, the dataset for year N-1 shall not be modified. However, the detection of the error and its explanation are documented in the documentation for the year N. This principle, consisting of not “rewriting” the reporting produced in a given year, will limit the risk of confusion.

First application

The first year of reporting pursuant to the present Decision will cover the annual chronicles from the first deployments until 31 December 2020. The information will thus be produced and available by the end of July 2021[29] at the latest.

6.3.4 Data format

The data will be kept up to date in the format specified in the Annex and attached to the present Decision.

As the deployment of optical fibre concerns a large number of parties, the Authority has set up a standardised reporting format, for the sake of efficiency and comparability, although this format leaves room for the possible operator specificities.

Operators' FttH architecture has important points in common, as this architecture is partly governed by regulatory decisions, where it is the subject of standardisation work and best practices (FttH expert

[29] For operators with closing dates for their fiscal years other than 31 December, the first set of data will be produced by 31 July 2021 at the latest on the basis of the last fiscal year allowing compliance with the aforementioned 7-month deadline.

committee, inter-operator work, etc.) and where the vast majority of building operators have converged on a similar architecture consisting of the installation of concentration points with fewer than 1,000 lines. The nomenclature thus presents, on the one hand, standardised line items for certain items, corresponding to network elements and offers usually associated with a network operator's activities and, on the other hand, non-standardised reporting for certain items (e.g. for the breakdown of revenue by offers, as described in section 6.3.2, the offers are not standardised even if the type of distinction expected is specified in Annex 4).

The use of a unified reporting format will also allow for better comparability between operators and better monitoring in the case of a network acquisition or disposal.

Operators must adhere to this reporting format, refraining from making any changes to tables' structure. The data shall be kept up to date in a spreadsheet format.

6.3.5 Governing principles for producing the information kept by operators

Legal entity's monitoring of the legal entity

The information kept up to date pursuant to the present Decision shall be for a specific legal entity, and not for a group of companies. If several companies in the same group are required to keep data up to date pursuant to the present Decision, every company concerned shall keep its own data up to date. This is consistent with the fact that every legal entity maintains its own social accounting and that it is a given legal entity that markets access to its network.

Production from the entity's accounting

The up-to-date expenditure and revenue information is produced from the entity's cost accounting (which is derived from its social accounting), directly or indirectly (in this case via allowances, see section 6.3.2 "Allocation keys used"). No expenditure or revenue information may be reproduced on the basis of modelling, the application of a flat rate, or any other equivalent process.

As mentioned in 6.3.2 ("Allocation keys used "), the elements provided by the operator shall derive, as far as possible, from a direct reading of the operator's accounts, although in some cases the data can, in practice, only come indirectly from the accounts.

Allocations or restatements are, however, made in the following cases:

- cases when information is not directly available, requiring an allocation in accordance with the principle of causality described below;
- the restatements needed to comply with the principle of reflecting the reality of the expenditure and the operator's revenues (see below).

Reflecting the reality of the operator's expenses and revenues

The information kept up to date must reflect the reality of the operator's expenses and revenues. The use of this information is the assessment of compliance with the pricing obligations applicable to the operator.

The typical tool used to do this is an intertemporal pricing model, such as the reference model published by the Authority in October 2015, accompanied by its notice[30]. The expenses and revenues used in such a model must reflect the expenses and revenues actually incurred by the operator, regardless of their accounting classification.

This is why:

- the reported expenditures must correspond to disbursable expenses; they therefore exclude depreciation and provisions; for simplicity's sake, it is not required to restate the discrepancies between invoicing and collection;

[30] See: https://www.arcep.fr/la-regulation/grands-dossiers-reseaux-fixes/la-fibre/le-cadre-reglementaire-de-la-fibre.html, section on "Pricing of access to ultrafast optical fibre networks outside very high-density areas".

- the revenue is reported regardless of the operator's accounting qualification (cf. section 6.3.2 “Revenues”).

Generally, when accounting standards prescribe processing of expenses or revenues that deviate significantly from the cash flows borne by the operator[31], a restatement shall be necessary to reflect the reality of the operator's expenses and revenues.

Principle of clarity and legibility

All of the information provided (e.g. name of network assets, name of offers) must be understandable and unambiguous for the Authority.

This objective shall be achieved by the choice of terms used in the accounting tables and by the precise description of the elements that require it in the documentation maintained pursuant to section 6.3.6.

The principle of causality

This involves allocating the costs of an element or activity according to what the “cause” of it is, i.e. in practice, according to the use of this element or activity.

If a single service is at the origin of a given cost, the cost is said to be “directly attributable” and is allocated in full to the activity that led to it. On the contrary, if several services are at the origin of a given cost, its allocation is made in proportion to the consumption or use of the corresponding element. The work unit measuring the consumption of the element must be as relevant as possible with regard to the use of the element.

This principle, which is general in scope, is typically applicable for the construction of allocation keys and the reporting of network uses (see section 6.3.2 on these two points).

The principle of non-discrimination

This principle is reflected in the fact that two equivalent uses of the same asset or the same service must be assigned equivalent costs. Moreover, the cost of using an element in relation to the appropriate work unit is the same whether it is the operator's internal use (building operator integrated with a retail operator) or the use by a third-party operator. This is in line with the more general principle of non-discriminatory pricing between operators, which implies that operators cannot make different use internally of the wholesale offers supplied to third-party operators. This means having equivalent internal and external revenue for the same use of the network by different offers.

This principle, which is general in scope, is typically applicable to the reporting of revenue, distinguished between internal and external revenue (section 6.3.2).

The principle of consistency and the principle of completeness

The principle of consistency

The use of information kept up to date for the purpose of price supervision requires the possibility of cross-referencing the reporting itself, for example expenditure and revenue, or expenditure and network description. It is therefore essential that the reporting comply with the principle of consistency, i.e. the correspondence between the information in two files intended to cover the same scope.

This principle also implies that the cumulation of the subcategories is always equal to the value of the higher aggregate category.

This is all the more necessary since, in a traditional regulatory accounting system, the operator is generally required to keep the accounts of the entire legal entity up to date in accordance with the prescribed procedures. In the interests of proportionality, such an obligation is not provided for in the

[31] E.g. spreading the accounting recognition of an revenue or expenditure over several years when it is collected/disbursed in one year.

present Decision, but the requirement of compliance with the principle of consistency is reinforced.

The principle of completeness

The principle of completeness, as tied to the principle of consistency, requires that all the information to be reported as part of a reporting process must be properly reported. This is vital to ensuring that the information provided is used appropriately. Operators are required to provide exhaustive reporting.

This principle applies in particular to the reporting of revenues and the reporting of network uses (see section 6.3.2). In the event the operator omits certain revenues, or network uses in the information kept up to date, the inferences that could be deduced in terms of price supervision could be faulty.

Data reliability and auditability

The operator must set up a reliable monitoring environment for the establishment and maintenance of the accounting information provided for in the present Decision, making it possible to guarantee the quality of the data kept up to date. Reporting must be auditable and verifiable by the Authority.

The system set up by the operator must make it possible to trace, for every piece of information reported, its audit trail, and explain in detail its formation.

Consistency over time

The information shall be updated annually. It is expected that the information relating to the same year, available in two reports made in different years, shall be the same. In the event of a discrepancy (e.g. correction of error), an explanation shall always be indicated in the documentation kept up to date in accordance with section 6.3.6.

6.3.6 Keeping up-to-date policies detailing the methodology used

To guarantee the transparency and legibility of the up to date accounting information, operators shall keep up to date the description of the terms that require it, along with a detailed description of the methodology used in the production of accounting information. This information is kept up to date in the form of a datasheet.

This documentation specifies in particular:

- the definition of the terms used in the reporting table that require it;
- the data sources used;
- the accounting standards and principles used;
- the allocations and restatements made, if applicable;
- and, more broadly, the methodological choices made in the production of reporting and any information necessary for the Authority to understand this reporting.

The maintenance of this reference framework is necessary to guarantee the principle of readability and auditability of the data.

A version of the documentation is produced for every fiscal year.

6.4 Reporting and monitoring procedures

6.4.1 Reporting procedures

Pursuant to section 6.3, any operator subject to the present Decision shall update the dataset containing the accounting chronicle up to and including the year N as well as the corresponding reference framework described in sections 6.3.2 and 6.3.6 respectively, by the end of the 7th month following the end of fiscal year N at the latest, according to the rules and formats described in these sections and the corresponding annexes.

The reporting of the data to the Authority shall be made by letter from the corporate officer or legal

representative, specifying that the data are transmitted under the present Decision, and that the data transmitted are, to the best of its knowledge, and after having taken all reasonable measures to this effect, in accordance with reality, without omissions likely to alter their scope, have been collected and processed in a reliable monitoring environment, and obtained and presented in accordance with the formats, methods, principles and rules set out in the present Decision.

The information shall also be sent by e-mail to the persons designated for this purpose by the Chair of the Authority. Within this information, the tables detailed in section 6.3.2 are transmitted in spreadsheet format.

6.4.2 Monitoring procedures

Monitoring by the Authority

The Authority may review the reporting it receives from operators.

The Authority may, first of all, ask the operator for any clarification on the construction of the reported information. The operator shall respond to the Authority as soon as possible.

In addition, to ensure compliance with the principles described above, the Authority may ask the operator to amend this information, in particular in the following cases:

(1) the Authority may first ask the operator to clarify or supplement the up to date accounting policy pursuant to section 6.3.6 ;

(2) if compliance with the principles require it, the Authority may ask the operator to amend the accounting information kept in order to comply with the principles set out in the Decision; the Authority may give detailed instructions to the operator on this point, which the latter must apply.

In these two cases, the operator shall transmit an amended version of its accounting information relating to the given year as soon as possible, within one month of the request in case (1) and within two months in case (2), except in exceptional circumstances.

Such an approach aims both to ensure compliance with the principles and methodologies set outby the Authority, but also to facilitate the understanding of the reporting.

Audit by an independent body

In addition to the monitoring it carries out, the Authority may request that the accounting information provided by the operator be audited by an independent body designated by the Authority, at the expense of the operator concerned.

Such an audit, which is commonly carried out as part of the audit of regulatory accounting, may indeed be necessary, in addition to the audit carried out by the Authority in accordance with the procedures described above, to ensure that the information kept up to date and reported complies with the rules and principles set by the Authority.

Unlike the processes traditionally implemented in asymmetric regulatory accounting, the Authority does not set up a systematic annual audit process of the reporting produced by all operators. It is a matter of being able to carry out, as necessary, audits in a manner that is proportionate to the regulatory objectives, taking into account, notably, the size of the operator and any difficulties identified following the Authority's prior monitoring. Small operators in particular are only eligible for an audit if and when their situation makes it necessary.

Such an audit obligation is relevant and proportionate to the objective of monitoring the pricing obligations of building operators.

The Authority shall determine the conditions of the audit, which may relate to the data reported, but also to their production process and audit trail, and in general to any element likely to verify compliance with the accounting obligations set out in the present Decision.

6.5 Adjustments for certain types of operator

If the present Decision is designed to apply to all FttH operators, provisions for adjustments are nonetheless made for two cases.

It should nevertheless be stated that, regardless of the reporting format and process, all building operators are subject to the cost accounting obligations provided for in the above-mentioned 2009 and 2010 Decisions. The adjustments set out below relate only to the procedures for implementing the obligation to account for costs and not to the principle of such accounting.

6.5.1 The case of public initiative networks

Public initiative network (PIN) operators represent a special case insofar as they are already bound by reporting obligations vis-à-vis their public contracting authority or funders, or by the specific obligations applicable to networks directly operated by public entities.

In addition, the pricing for these networks is set within a specific framework, taking into account, in particular, the principles set out in Article L. 1425-1 of the Local and Regional Authority Code (CGCT) and the pricing guidelines established by Arcep[32].

Consequently, it seems proportionate that these operators not be subject to all the stipulations listed in sections 6.3 and 6.4, but with adapted provisions.

In place of the provisions set out in the present Decision, these operators shall therefore be able to keep up to date and transmit to the Authority reporting of the same nature as that requested by the present Decision, but which these operators would already have available in their internal monitoring tools or the reporting they transmit to public entities.

As the formats of reporting requested by these public entities may differ from the reporting provided for in the present Decision, the information supplied may in some respects be less detailed than the information stipulated in the Decision. However:

- a sufficient level of reporting is expected, making it possible to assess the allocation and evolution of the main cost and revenue items;
- all the information requested in the present Decision, and which is already produced for external use (e.g. annual reports for delegators, reporting for financing mechanisms such as the National Digital Society Fund (*Fonds national pour la Société Numérique* or FSN)) or directly available with the operator must be sent to the Authority.

Where necessary, the Authority may clarify these elements by means of additional guidelines.

It is also specified that:

- given public initiative networks' particular features, they shall include subsidies received and fees paid on specific lines in the reporting;
- the submission to the Authority shall follow the same procedures as defined in the present Decision, in particular annual reporting according to the deadline set out in section 6.4.1 and a submission in spreadsheet format;
- this reporting may be monitored by the Authority in accordance with the procedures set out in section 6.4.2.

6.5.2 The case of small networks

For the sake of proportionality, operators with fewer than 50,000 FttH lines and that have not expressed an intention to exceed this threshold are not subject to the obligations detailed above.

[32] Guidelines – Pricing ultrafast optical fibre network access deployed on public initiative (December 2015): https://www.arcep.fr/uploads/tx_gspublication/lignes-dir-ARCEP-tarification-RIP-dec2015.pdf

If the operator is part of a group of companies, this threshold is assessed on a consolidated basis for the entire corporate group.

These operators nevertheless remain subject to an annual obligation to transmit cost elements of the same nature as those requested by the Authority in the present Decision, but which may be less detailed. These elements may also, as necessary and in proportion to the regulatory objectives, be monitored by the Authority in accordance with the procedures set out in section 6.4.2.

7 European Commission comments

Pursuant to Article 7 of the amended Framework Directive 2002/21/EC, on 26 October 2010, Arcep notified the European Commission and the competent authorities of the other European Union Member States of the draft decision specifying the terms and conditions for access to ultra-fast broadband optical fibre electronic communications lines. Following that notification, the European Commission published its comments letter on 26 November 2020.

Arcep notes that the European Commission does not make any observations specifically on the content of the notified draft decision, and specifies that Arcep "*may adopt the draft measure".*

The European Commission comments on the symmetrical framework in general. Stressing, *"that the current symmetrical framework has been in place since 2010 and shall in principle remain unchanged, and while the competitive and regulatory situation prevailing in France has changed since then and will continue to evolve with the notified measures that are currently being evaluated*," urges *ARCEP "to ensure that its symmetrical framework is based on a sufficient analysis of the available evidence on its likely effects on incentives to invest in fibre and on competition, also taking into account the Code and the future BEREC guidelines on Article 61, paragraph 3, in particular in the light of the second subparagraph of that provision.* It also calls on Arcep to "*strike the right balance between the objective of allowing passive access to the infrastructure of building operators and the principle that symmetrical obligations should not be extended beyond what is strictly necessary, in particular by assessing the extent to which significant and non-transitory economic and physical barriers to duplication significantly limit competitive outcomes for end users."*

Arcep is particularly committed to ensuring that its actions are resolutely pro-investment. For example, the symmetrical framework, the foundations of which were laid almost ten years ago, was developed with the aim of encouraging operators' investments in fibre-to-the-home networks while maintaining a high degree of competition. By encouraging the use of co-investment and defining the conditions for access to the thus deployed networks, it makes it possible to mobilise the financing capacities of all operators, whether they deploy or access the networks, and thus to increase the coverage of these networks while ensuring conditions of effective and fair competition.

The Authority notes that this pro-investment orientation anticipated the new European Electronic Communications Code, one of whose main ambitions is to promote connectivity to very high-capacity networks and whose provisions encourage the use of co-investment by operators to accelerate deployments and access to the networks.

The Authority notes that this pro-investment regulation has enabled building operators to commit massively to the deployment of FttH networks, with nearly 22.2 million premises covered by FttH, i.e. nearly 55% of the total number of premises[33], and a very strong acceleration in recent years. Excluding frequency acquisitions, operators' investments reached €10.4 billion in 2019, an increase of 50% over the last 5 years. Investments in fixed networks alone represent 75% of this amount, and have increased by more than 40% over the last five years. This momentum is set to continue, as operators have confirmed their investment projects in private and public initiative areas. Operators are thus still planning to deploy networks intended to cover 15 million additional premises over the next five years, with a target of national FttH coverage of 100% of premises by 2025.

Arcep also notes that the four main commercial operators rely on the wholesale passive access products

[33] In Q3 2020, in France

provided for in the symmetrical framework. The very high technical and commercial autonomy they obtain nationwide through these solutions, in relation to the building operator, has enabled them to market a variety of fibre plans for the benefit of end users. The high rate of network sharing, with nearly 91% of the premises covered by FttH already shared by at least two operators[34], also consolidates the networks' economic equation, allowing a plurality of building operators to deploy new optical local loops.

The rollout and network sharing momentum in the wholesale market is also found in the retail market, with nearly 41% of the premises covered by FttH having subscribed to a commercial FttH offer. It has led to the emergence of an array of retail offers, diversified in terms of speed and services and marketed by several operators, which are likely to satisfy users at prices that are relatively homogeneous across the country and among the most competitive in Europe.

As requested by the Commission, Arcep remains attentive to ensuring that its actions continue to encourage investment, and in particular that the symmetrical framework is part of a balance between incentives to invest in FttH networks and granting third parties passive access to these networks, thereby stimulating competition for the benefit of end users, in accordance with the provisions of the new European Electronic Communications Code. As with the work it did on initiating a review of market analyses for the sixth round[35], the Authority shall conduct an assessment of the symmetrical framework and its effects during the next round of market analyses.

[34] 76% by at least three operators and 51% by at least four operators, as of June 30, 2020

[35] "Review of the current and outlook for the next round of market analysis" published on 11 July 2019

The following has been decided:

Article 1. Definitions

The terms used in the present Decision are defined in Annex 1 of Arcep Decision No. 2015-0776 of 2 July 2015.

Section I. Fibre availability nationwide

Article 2. Framework for cases of postponed installation of an optical connection point beyond the completion deadline, until a connection request is made ("connectable upon request" premises)

When, in a given concentration point's service area, the period provided for in paragraph 4 of Article 3 of Arcep Decision No. 2010-1312 of 14 December 2010 has expired, and when, for residual, pre-identified and justified cases, the building operator has not deployed its network in the immediate vicinity of certain households or business premises, it shall deploy it from the date of the first connection request, within a period that it announces and which may not exceed 6 months from the date of this request, except for duly justified exceptions.

Article 3. Framework for the possibility of a specific pricing for the installation of the optical connection point for "connectable upon request" premises

Where the cost of establishing the portions of the network in the immediate vicinity of the households or business premises referred to in Article 2 diverges significantly from the *ab initio* co-financing rate proposed in the offer for access to that network, the construction of the portions concerned may be accompanied by a specific fee, provided that this rate does not exceed the incremental cost of construction.

As soon as the economic conditions of the project allow it, the building operator shall no longer make the connection of households or business premises subject to the payment of the fee mentioned in the previous paragraph.

Article 4. Deadline for the connection of new buildings and housing estates

When, in a given concentration point's service area, the period provided for in paragraph 4 of Article 3 of Arcep Decision No. 2010-1312 of 14 December 2010 has expired, the building operator shall ensure the equipment and connection of the new households and business premises resulting from the construction of a new building, of a new housing estate or a new single-family home, within a reasonable period of time from the provision of the necessary infrastructure.

This period may not exceed three months from the date of such provision unless the contractor has not received, within a notice period of three months, the necessary information from the contracting authority, builder or developer.

Article 5. Deadline for the connection of additional or isolated buildings and settlements

If, in a given concentration point's service area, the period provided for in paragraph 4 of Article 3 of Arcep Decision No. 2010-1312 has expired, the building operator shall ensure, within a reasonable period of time, the installation of optical fibres in homes and business premises that could not previously be equipped with optical fibres, where such homes and business premises have been notified to it.

The period referred to in the preceding paragraph may not exceed six months from the date of the report, or, where applicable, the agreement of the owners or co-owners concerned.

Article 6. Process for reporting and correcting missing data or incorrect building-level information

The building operator shall set up a process for commercial operators to report missing or erroneous data in the information made available by the building operator in accordance with Articles 12 and 14 and Annexes 3 and 4 of Decision No. 2015-0776.

The building operator shall add the missing data or correct the incorrect data within a reasonable period of time after it has been reported by the commercial operator.

Article 7. Specific ordering process that does not require a standardised identifier

When, in a given concentration point's service area, the period provided for in paragraph 4 of Article 3 of Arcep Decision No. 2010-1312 has expired, the building operator shall set up a process for commercial operators to order access to an ultra-fast broadband optical fibre electronic communications line within a reasonable period of time, without the need to provide standardised information.

This period may not exceed three months from the date of its order by the commercial operator, except in duly justified cases that are particularly complex and require major works or an intervention on private property, for which the maximum period is extended to six months.

Section II. Operational and technical non-discrimination guarantees

Article 8. Strengthening of non-discrimination guarantees concerning information systems and the operational and building operators' technical processes

In terms of information systems and operational and technical processes, the building operator shall use common tools for all operators, including its downstream arm, to provide access to the lines.

As an exception to the previous paragraph, when the use of a common tool is not proportionate in relation to the expected benefit, the building operator shall implement solutions to ensure equivalence of treatment between all operators, as well as monitoring of their performance in the form of the measurement of relevant indicators. The lack of use of a common tool and the use of these solutions and related indicators shall be duly presented and justified by the building operator to the Authority at its request. The building operator shall send these indicators to the Authority on a monthly basis.

Article 9. Strengthening of the building operator's guarantees concerning the circulation of information obtained from third-party operators in the provision of wholesale access

The building operator shall justify to Arcep, upon request, the processes it has implemented to ensure compliance with the obligation set out in Article D. 99-6 of the Postal and Electronic Communications Code.

Article 10. Non-discrimination guarantees for the information systems and business processes of offers with increased QoS provided on an adapted FttH architecture

The building operator shall ensure that the access services and the operational and technical processes relating to the passive access offer referred to in Article 12 are provided under the same conditions for all operators, including its potential downstream marketing arm.

The building operator shall formalise and keep up to date, in the form of protocols, the technical conditions and the prices of internal sales charged between its various entities.

The building operator shall send the signed protocols and amendments to the Authority within a period which may not exceed ten days from their conclusion.

Section III. Adaptation of the terms and conditions for accessing FttH lines for non-residential uses

Article 11. Obligation to offer passive access with Level 1 increased quality of service

For every household or business premises served by an ultra-fast broadband optical fibre electronic communications line that it operates, the building operator shall provide an option to its access offer ensuring a guaranteed recovery time of 10 working hours in the event of an operating incident. This option also includes a penalty mechanism in the event of non-compliance with the conditions for restoring service, with different levels of penalties that must be proportionate to the scale, particularly temporal, of the breaches observed.

The building operator shall include in the aforementioned option a service call in the event of an outage on the jumper establishing optical continuity between the transmission drawer and the distribution drawer within the concentration point, at the request of a commercial operator.

Article 12. Obligation to offer passive access with Level 2 increased quality of service

The building operator shall provide, at the level of the concentration point, for every household or business premises served by an ultra-fast broadband optical fibre electronic communications line that it operates, an offer of access to a line providing for the restoration of service within four working hours and, optionally, four non-working hours, in the event of an operating incident. This access offer also includes a penalty mechanism in the event of non-compliance with the conditions for restoring the service, with different levels of penalties that must be proportionate to the scale, particularly temporal, of the breaches observed.

When the building operator offers a remote connection offer, it also offers access to the line with increased quality of service mentioned in the first paragraph at the level of the remote shared connection point.

The building operator shall include in its access offer a terminal connection service providing for the appropriate operational arrangements and level of quality of service related to the provision of high-quality access to meet the needs of business customers, and a deadline for the production of access of a maximum of 45 working days.

Section IV. Quality of service on FttH networks

Article 13. Quality of service on FttH networks

The building operator shall include in its access offer service level commitments and service level agreements, relating in particular to the elements specified in **Annex 1**.

The building operator shall specify in its access offer the mechanisms for establishing and collecting the penalties associated with the above-mentioned commitments and guarantees, applying to itself and to commercial operators, proportionate to the severity of the breaches observed, creating a sufficient incentive to improve quality of service and sustain the attractiveness of these offers.

The building operator shall comply with quality of service objectives, including the indicators and thresholds set out in **Annex 2** to the present Decision.

The building operator shall measure and transmit to Arcep on a monthly basis the quality of service indicators set out in **Annex 3** to the present Decision.

The building operator shall measure and publish on a monthly basis the quality of service indicators set out in **Annex 3** to the present Decision.

Section V. Clarification of accounting obligations

Article 14. Scope of application

Any entity that establishes or has established an ultra-fast broadband optical fibre electronic communications line in an existing building that makes it possible to serve an end user shall be subject to accounting obligations, in accordance with the procedures specified below.

Article 15. Information to be kept up to date

The entity referred to in Article 14 shall keep up to date, in accordance with the scope, segmentation and granularity defined in Section 6.3.1, the information defined in Section 6.3.2, in accordance with the procedures defined in Annex 4.

The segmentation creates a distinction:

a. In terms of geography between:
   - very high-density areas;
   - less densely populated areas.
b. In terms of network segments between:
   - hosting at the OCN;
   - remote connection (RCP-CP link);
   - distribution (CP-OCP link);

The information kept up to date includes:

a. Deployment and operating expenses, including related party information; on the latter point, the concerned entity shall, at the request of the Authority, provide information justifying the pricing and technical conditions of its contracts with the related parties, provided that the latter are linked with the information provided
b. Income, including reporting the concerned entity's internal revenue
c. The physical description of the network
d. The use of the network by the different offers
e. The allocation keys used
f. Transactions relating to network acquisitions and disposals
g. Flows relating to resale rights

This information shall be kept up to date in the form of annual chronicles. The annual chronicle containing the data for a given fiscal year shall be produced no later than the end of the 7th month following the end of this same fiscal year.

The first dataset shall be produced by 31 July 2021.

The data shall be kept up to date in spreadsheet format, as specified in Annex 4.

In compiling this information, the concerned entity shall comply with the principles described in section 6.3.5, namely: monitoring by legal entity; production based on the concerned entity's accounts; reflection of the reality of the concerned entity's revenue and expenditures; the principle of clarity and legibility; the principle of causality; the principle of non-discrimination; the principle of consistency and the principle of completeness; data reliability and auditability; consistency over time.

The concerned entity shall also keep up to date, according to the schedule described in paragraph 4, a datasheet detailing the methodology used as described in section 6.3.6.

Article 16. Transmission and verification procedures

The concerned entity shall transmit to the Authority the information described in Article 15 on an annual

basis, including the datasheet detailing its methodology, within the same time limits as those described in this article, by letter from the corporate officer or legal representative, in accordance with the procedures described in section 6.4.1.

Reporting submissions shall be verified by the Authority in accordance with the procedures described in section 6.4.2. The Authority may ask the concerned entity for any clarification on the construction of the information provided. It may also ask the concerned entity to make the necessary changes to the information provided in order to comply with the present Decision. The information or data thus modified shall be transmitted to the Authority in accordance with the deadlines set out in the above-mentioned section. Finally, the Authority may appoint an independent body to verify, at the expense of the concerned entity, the compliance of the information provided by the latter with the rules laid down in the present Decision.

Article 17. Adaptation of the procedures for certain entities

By way of derogation from Articles 15 and 16, entities that have established, are establishing or operating a public ultra-fast broadband optical fibre network able to serve an end user within the framework provided for in Article L. 1425-1 of the Local and Regional Authority Code, on the one hand, and entities whose network has fewer than 50,000 ultra-fast broadband optical fibre electronic communications lines and that have not notified their intention to exceed this threshold, on the other hand, shall keep up to date and provide the accounting data that they keep up to date in accordance with the adapted procedures specified in section 6.5.

Section VI. Implementation timelines

Article 18. Implementation timeline for offers with Level 1 quality of service

The provisions of paragraph 1 of Article 11 shall come into force no later than three months after publication of the Decision in the *Journal Officiel* of the French Republic.

When the commercial operator makes a request as mentioned in paragraph 2 of Article 11, the building operator has a period of 6 months from the date of the request to grant it.

Article 19. Implementation timeline for offers with Level 2 quality of service

In very high-density areas, outside low density pockets, the building operator shall grant requests for access to the offer referred to in Article 12, under the conditions set out in that Article and in Article 10 of the present Decision, within six months of that request.

Throughout the territory, with the exception of low-density pockets in very high-density areas, the provisions of Articles 12 and 10 shall come into force no later than three months after publication of the Decision in the *Journal Officiel* of the French Republic.

Where the building operator makes adaptations to its FttH infrastructure in order to supply the offer provided for in Article 12 of the present Decision, it may, for a maximum period of 21 months after the publication of the Decision in the *Journal Officiel* of the French Republic, apply longer delivery times than the standard period imposed in Article 12.

Article 20. Other implementation timelines

The provisions of Article 6 shall come into force six months after publication of the Decision in the *Journal Officiel* of the French Republic.

The provisions of Article 8 shall come into force six months after publication of the Decision in the *Journal Officiel* of the French Republic.

The provisions of paragraphs 1, 2 and 4 of Article 13 shall come into force three months after publication of the Decision in the *Journal Officiel* of the French Republic.

The provisions of paragraph 5 of Article 13 shall come into force six months after publication of the

Decision in the *Journal Officiel* of the French Republic.

The provisions of paragraph 3 of Article 13 shall come into force twenty-four months after publication of the Decision in the *Journal Officiel* of the French Republic.

Section VI. Execution

Article 21. Execution

The Director General of the Authority is responsible for the implementation of the present Decision, which shall be published in *Journal Officiel de la République française*, after its approval by the Minister responsible for electronic communications.

Signed in Paris on 8 December 2020

The Chairman,

Sebastien SORIANO

Annex 1 Quality of service: elements requiring a contractual commitment and associated penalty mechanism

For every passive access offer with and without increased quality of service on a shared optical local loop that they market, building (aka infrastructure) operators are required to commit to a set of key elements, on which they must define a penalty mechanism. The elements that must be the subject of a contractual commitment and an associated penalty mechanism are as follows:

1. **Access line production**
   1) Scope common to the "building operator" (BO mode) and "subcontracting commercial operator" ("STOC" mode)
      - Network failure reports on lines delivered in the past 30 days – BO's responsibility
      - Failure to process an access request – BO's responsibility
   2) Specific to "BO" mode
      - Access delivery time
   3) Specific to "STOC" mode
      a. Deadline for providing information on a new optical route in the case of reprovisioning
      b. Customer support line non-availability (number of calls not answered in under 3 minutes)
   4) The case of "connectable upon request" premises
      - OCP delivery time
2. **Production of RCP-CP links**
   - for CPs already open for marketing, remote connection links delivery time
3. **Hosting of active equipment at the CP level, and at the RCP, if applicable**
   - Hosting service delivery time
   - Deadline for a feasibility study on providing a hosting service
4. **After-sales service**
   1. Common to all access lines
      - Maximum service downtime (annual)
   2. Specific to access without increased QoS
      - Recovery time on the CP-OCP segment included;
      - Recovery time on the OCP-IOTP segment;
      - Guaranteed recovery time of 10 working hours on the RCP-CP segment;
      - Repeat interruptions of service on the CP-OCP segment;
   3. Access-specific with increased quality of service
      - Guaranteed recovery time of 10 working hours for offers with Level 1 increased QoS
      - Guaranteed recovery time of 4 working hours and 4 non-working hours for offers with Level 2 increased QoS

Annex 2 Quality of service: QoS thresholds

The quality of service thresholds for shared optical local loop offers are set for each of the following indicators for the entire round of market analysis.

1) Indicators common to all access lines

Indicators	Unit	Type of threshold	Threshold value
Production			
Network failure report rates on lines delivered in the past 30 days – building operator's responsibility	%	Upper limit	2%
Specific to BO mode			
Rate of non-compliance with access line delivery dates– BO mode	%	Upper limit	10%
Specific to "STOC" mode			
Percentage of orders subject to anticipatory reprovisioning – BO originated	%	Upper limit	7%
In the case of anticipatory reprovisioning, deadline for providing information on a new optical route not requiring major civil engineering work – 80th percentile	Working day	Upper limit	7 WD
In the case of anticipatory reprovisioning, deadline for providing information on a new optical route requiring major civil engineering work – 80th percentile	Working day	Upper limit	25 WD
Case of "connectable upon request" premises			
Rate of non-compliance with delivery dates for optical connection points on overhead (OCP)	%	Upper limit	20%
Production remote access points (CP-RSCP)			
CP-RSCP delivery time (first order) – 95th percentile*	Working day	Upper limit	20 WD
CP-RSCP delivery time (subsequent orders) – 95th percentile*	Working day	Upper limit	35 WD
Rate of non-compliance with CP-RSCP link delivery dates	%	Upper limit	20%
After-sales service			
Rate of non-compliance with recovery times on the OCP-IOTP segment	%	Upper limit	30%
Service recovery time on the OCP-IOTP segment – 95th percentile	Working day	Upper limit	4 WD
Rate of non-compliance with recovery times on the CP – OCP segment	%	Upper limit	20%
Service recovery time on the CP-OCP segment – 95th percentile	Working day	Upper limit	6 WD

Rate of non-compliance with the guaranteed recovery times of 10 working hours CP on the CP-RSCP segment	%	Upper limit	20%
Average recovery time on the CP-RCP segment	WH	Upper limit	8 BH
Rate of access downtime reports (OCN-IOTP) in a month	%	Upper limit	1%
Rate of repeat service interruptions on the CP-OCP segment	%	Upper limit	10%

Table 1: Shared optical local loop access thresholds

Each of these indicators shall be understood as follows:

Production:

- Network failure reporting rates on lines delivered less than 30 days ago – BO's responsibility is understood as the measure of the number of access lines delivered by the building operator during month M-2 and subject to a network failure report within 30 calendar days of their delivery, and compared to the number of access lines delivered during month M-2; the rate of non-compliance with the delivery time for access – BO mode corresponds to the number of access lines delivered in BO mode within a period exceeding the building operator's delivery commitment, compared to the total number of access lines delivered;
- The percentage of orders that are subject to anticipatory reprovisioning corresponds to the number of orders subject to anticipatory reprovisioning whose cause attributable to the building operator;
- The deadline for providing information on a new optical route (in the case of anticipatory reprovisioning) not requiring major civil engineering work – 80th percentile corresponds to the measure of the 80th percentile of the timeline for informing stakeholders of a new optical route when an order has been subject to anticipatory reprovisioning, without taking into account delays attributable to entities other than the building operator, and when the building operator does not have to perform major civil engineering work to make the optical path available;
- The customer support line non-availability rate corresponds to the number of calls that are not actually answered by the building operator's telephone helpline within a period of less than three [3] minutes, in the case of active provisioning;
- The OCP delivery date non-compliance rate is the number of OCPs delivered within a time frame exceeding the building operator's delivery commitment, relative to the total number of OCPs delivered;
- The delivery time of a RCP-CP link (first order) – 95th percentile corresponds to the measurement of the 95th percentile of a commercial operator's delivery time on the first order on a given CP;
- The delivery time of a RCP-CP link (subsequent orders) – 95th percentile corresponds to the measurement of the 95th percentile of a commercial operator's delivery time on all except the first order on a given CP;
- The rate of non-compliance with the contractual deadline for the delivery of RCP-CP links corresponds to the number of RCP-CP links provided within a period exceeding the building operator's delivery commitment, compared to the total number of RCP-CP links delivered.

Concerning the delivery time for an RCP-CP link – 95th percentile, the two corresponding indicators, distinguishing the first order from subsequent orders, shall be replaced five years after the date of publication of the present Decision in *the Journal officiel* of the French Republic, by the unique "delivery time for an RCP-CP link – 95th percentile" indicator, with an upper limit threshold equal to 20 working days. This indicator corresponds to the measure of the 95th percentile of the delivery time for RCP-CP links from the time they are ordered.

After-sales service:

The rate of compliance with the recovery period on the OCP-IOTP segment

- The rate of non-compliance with the service restoration time on a given segment corresponds to the number of reported network failures on this segment that have been repaired and resolved by the building operator beyond the associated contractual deadline and compared to the total number of reports;
- The recovery time on the OCP-IOTP segment – 95th percentile corresponds to the measurement of the 95th percentile of the repair and resolution time for network failure reports by the building operator on the OCP-IOTP segment;
- The recovery time on the CP-OCP segment – 95th percentile corresponds to the measurement of the 95th percentile of the repair and resolution time for network failure reports by the building operator on the CP-OCP segment;
- The rate of non-compliance with the RCP-CP recovery time of 10 working hours corresponds to the number of reported network failures restored and resolved by the building operator that did not comply with the deadline of 10 working hours on the RCP-CP segment;
- The average recovery time on a given segment corresponds to the average time implemented by the building operator to restore access and resolve the network failure report on that segment;
- The maximum service interruption compliance rate corresponds to the number of access lines for which the maximum service interruption has been exceeded, in relation to the total number of access lines;
- The line unavailability rate corresponds to the duration of access unavailability, compared to the total nominal life of the lines;
- The rate of repeat service interruptions in the CP-OCP segment corresponds to the number of building operator service calls in response to new network failure reports made within 14 days of closing a previous network failure report, i.e. when the end customer reports that they have no service (e.g. cable cut-off), and compared to the total number of resolved network failure reports in the CP-OCP segment.

The indicators are evaluated on all lines. The method for calculating the indicators concerned shall remain unchanged during the present market analysis period.

2) Indicators specific to access lines with increased QoS

Indicators		Unit	Type of threshold	Access lines with increased QoS
Production				
Delivery time compliance rate for access lines with GRT 4BH/NBH – BO mode		%	Lower limit	90%
Average delivery time for access lines with GRT 4BH/NBH – BO mode		WD	Upper limit	45
After-sales service				
Recovery time compliance rate		%	Lower limit	80%
Average recovery time	For GRT 10BH incidents	Hour	Upper limit	10h
	For GRT 4BH/NBH incidents	Hour	Upper limit	6h
Average rate of compliance with maximum service downtime	On GRT 10BH access lines	%	Lower limit	99%
	on GRT 4BH/NBH access lines	%	Lower limit	99.9%
Average total line downtime	on GRT 10BH access lines	%	Upper limit	0.01%
	on GRT 4BH/NBH access lines	%	Upper limit	0.001%

Table 2: Specific thresholds for shared optical local loop access lines with increase QoS

Each of these indicators shall be understood as follows:

Production:

- The rate of compliance with the delivery date for access lines – BO mode corresponds to the number of access lines delivered in BO mode in compliance with the building (aka infrastructure) operator's delivery commitment, compared to the total number of access lines delivered;
- The average time to access delivery – BO mode corresponds to the building operator’s average implementation time for access delivery.

After-sales service:

- The recovery time rate of compliance corresponds to the number of reported network failures repaired and resolved by the building operator in compliance with the associated contractual deadline and compared to the total number of network failure reports;
- The average recovery time corresponds to the building operator’s average implementation time for restoring access and resolving the network failure report on this segment;
- The maximum service interruption compliance rate corresponds to the number of access lines for which the maximum service interruption has been exceeded, in relation to the total number of access lines;
- The line unavailability rate corresponds to the duration of access unavailability, compared to the access lines’ total nominal life.

The indicators are evaluated on all lines. The method for calculating the indicators concerned shall remain unchanged during the present market analysis period.

3) Level of assessment

The indicators shall be assessed on all lines built or operated by a building operator located in a co-financing area that meets the following criteria:

- 80% of the housing or business premises in the co-financing area are connectable;
- the number of active lines has exceeded at least 30% of the connectable lines in the co-financing area.

4) Assessment mechanism for indicators common to all access lines

The assessment mechanism detailed below makes it possible to assess the overall quality of wholesale services on FttH networks. The assessment of the building operator's compliance with this obligation shall relate to the assessment of its performance, for the indicators common to all access lines, assessed independently for the production indicator and after-sales service indicator sub-groups.

The production indicators are understood as those associated with the production of access lines and listed respectively as such in Table 1 above.

The after-sales service indicators are understood as those associated with the after-sales service and listed as such in Table 1 above.

For a given sub-group (production or after-sales service), the obligation is met, in a given quarter, if the following cumulative criteria are met for the indicators belonging to that sub-group, for the variances corresponding to a failure to meet the target:

For indicators that do not meet the target value:

$$\frac{1}{N_{indicators}} \sum \frac{|Observed\ value_{indicators} - Target\ value_{indicators}| - \times}{Target\ value_{indicators}} \leq X\%$$

AND

During at least one of the last three quarters:

$$\frac{1}{N_{indicators}} \sum \frac{|Observed\ value_{indicators} - Target\ value_{indicators}| - \times}{Target\ value_{indicators}} \leq Y\%$$

{where *N is the total number of indicators subject to this obligation*

	X% (quarterly threshold)	Y% (threshold for three quarter)
Production	10%	3%
After-sales service	20%	1%

Annex 3 Quality of service: indicators for publication

Building operators shall submit a set of quality of service indicators, accompanied by a datasheet specifying the definition and method of calculation for each of them, including, at a minimum, the indicators listed in Annex 2 as well as the indicators listed below to the Authority on a monthly basis, in a format specified by the Authority, and shall publish them monthly on a freely and easily accessible website in a format that allows for easy reuse of the data:

1. Production of access lines

1) Scope common to the "building operator" (BO mode) and "subcontracting commercial operator" (STOC) modes

- Defect rates in the terminal connection (defects observed on the terminal connection when it is installed), if necessary distinguishing between BO mode and STOC mode
- Shared optical local loop access failure rate – BO's responsibility, corresponding to the number of orders refused or not produced for which the cause is attributable to the building operator and compared to the number of orders placed by all operators

2) STOC-mode specific

- Deadline for a commercial operator to submit its subcontracting report, calculated from the date on which the building operator took the subcontracted order
- Deadline for the commercial operator to submit its report on the activation of the line's commercial operation calculated from the building operator's transmission of the line's commercial availability report
- Order rates that are subject to active reprovisioning – BO and CO-originated, corresponding to the rate of orders that are subject to reprovisioning whose cause is attributable to the building operator or the commercial operator respectively (slamming)
- Customer support line non-availability rate

2. Hosting of active equipment at the CP level and, if applicable, the RCP level

- Rate of compliance with the contractual delivery time of the hosting service
- Rate of compliance with the contractual deadline for the feasibility study of the implementation of the hosting service

3. After-sales service for access lines

The relevant service quality monitoring indicators for after-sales service and subject to publication and transmission obligations are:

1) Common scope with/without increased QoS

- Rate of erroneous network failure reports by a commercial operator during the month, compared to the total number of network failure reports that month
- Maximum interruption of services (annual)
- Repetition rate of service disruptions in the CP-RCP segment, which corresponds to the number of repeat service calls by the building operator for network failure reports within 14 days of the resolution of prior network failure reports, i.e. when the end customer reports a service network failure (e.g. cable cut), and compared to the total number of resolved network failure reports in the RCP–CP segment.

New indicators may, if necessary, be defined after consultation between building operators and third-party operators or on the initiative of the Authority on the basis of a subsequent decision.

In addition, building operators shall provide in a clear and comparable format, with the same frequency and for the same periods, the same indicators for the corresponding offers marketed by the building operator in downstream markets, in a clear and comparable format, with the same frequency and for the same periods.

Building operators shall indicate in sufficient detail, for example in the Annex, the methods of used to calculated the indicators.

Annex 4 FttH accounts reporting

The present Annex specifies the format of the accounting report referred to in Section V of the present Decision. The reporting documents to be completed, in spreadsheet format, are attached to the present Decision. Screenshots of the individual tabs are included in this Annex.

1 Reporting structure: principles

The operator's report shall be composed of two files in spreadsheet format (one per area: very-high density, less densely populated), accompanied by an explanatory note. The distinction between these two areas seems relevant, as the architectures and their regulation are different.

The scope of the reporting shall be determined:

- In terms of network segments:
    - the entire shared optical local loop (FTTH) network, from the hosting to the optical connection node (OCN) [36] to the optical network terminal (ONT) for less densely populated areas;
    - the entire shared optical local loop (FTTH) network, from the concentration point to the ONT for very high-density areas.

In the rest of the document, the OCN hosting – terminal connection scale shall be used by default to simplify the presentation, but this distinction in scope between very-high density, less densely populated areas is applicable for all the planned reporting.

- In terms of assets: all of the assets used by these FttH networks for the provision of passive access to the network, whether in whole or in part.

With the exception of some specific tabs, every column corresponds to a year (one additional column every new year), with the information being provided online.

Unless otherwise specified, cost elements must be reported in k€. The accuracy shall be at least to the euro.

Reporting structure: description

A) For each reporting area, a spreadsheet file with the following tabs

1. **General information**
2. **Capital expenditure (CAPEX)**
3. **Asset acquisition and disposal transactions**
4. **Operating expenses (OPEX)**
5. **Revenue**
6. **Resale rights**
7. **Work units**
8. **Uses of the network**
9. **Allocation keys**
10. **Assets by disposal date (this tab is completed only in the case of asset disposals)**

[36] When the CP comprises fewer than 1,000 lines, the remote shared connection offers are in practice delivered to the OCN and in the case of an CP with more than 1,000 lines, the latter is combined with the OCN.

B) Explanatory note

2 General Information tab

The purpose of this tab is to provide general information.

Details:

The following information shall be provided:

Characteristics of the entity:

- Name of the legal entity submitting the accounting report
- SIREN (business ID number)
- Building Operator Code(s) [37, 38]
- Other details regarding the entity

Characteristics of the reporting:

- Reporting area (very high-density, less densely populated)
- Last fiscal year reported
- Version (in the case of multiple submissions for the same fiscal year)
- Date of reporting
- Observations regarding the reporting

Accounting standard:

- Accounting standard used (French/IFRS standards)
- Clarification of accounting standards and processing (factoring in standard XX using data from year YY[39], etc.)

[37] https://www.arcep.fr/la-regulation/grands-dossiers-reseaux-fixes/la-fibre/listes-de-diffusion-inter-operateurs-sur-lacces-aux-lignes-en-fibre-optique-installees-dans-les-immeubles.html#c1498

[38] If there is more than one code, provide an explanation. Also provide an explanation if there have been variations over time.

[39] Example: taking into account IFRS 15 as of 2018 data, etc.

General information	
Characteristics of the entity	
Name of the legal entity	
SIREN	
Building operator code(s)	
Characteristics of the reporting	
Reporting area	
Last fiscal year reported	
Version (in the case of multiple submissions for the same fiscal year)	
Date of reporting	
Observations regarding the reporting	
Accounting standard	
Accounting standard used	
Clarification on accounts processing	

Figure 1 – Summary tab

3 Capital Expenditures (CAPEX) tab

In the "CAPEX" tab, the operator shall detail its annual investments in FttH local loops by network segment and asset class

Principles: structure

The tab consists of a summary section (section 1) and two more detailed sections (sections 2 and 3).

Investments shall be reported by network element (OCN hosting, transmission, distribution and terminal connection), according to the specified granularity.

For the sake of comparability, a single template shall be used for all operators for the summary section (Section 1) which shall provide information on the direct, indirect and common costs of a series of assets (see below). More detailed sections (sections 2 and 3) follow, which are more flexible, to take operators' specificities into account.

CAPEX is cross-referenced by network segment and by asset class:

- four network segments:
  - Hosting at the OCN (MDZ only)
  - Transportation (OCN-CP) (ZMD only)
  - Distribution (downstream CP excluding terminal connection, typically CP-OCP[40])
  - Terminal connection (typically OCP-ONT)
- four asset classes:
  - Assets corresponding to the standard FttH architecture ("standard assets")
    - Civil engineering

[40] For architectures with adaptations, such as certain " FttE" networks, the OCP may be replaced by other access points (e.g. establishments open to the public in Orange's FttE architecture).

- Cables
- Other assets

- Specific assets

Clarification on network segments: for the sake of simplicity, Arcep is not asking for a specific accounting of the CP network segment between the OCN-CP and CP-OCP segment. The natural allocation of CP costs in this case seem to be more towards the "Distribution" segment.

Clarification on assets : Standard assets correspond to assets linked to the overall FttH architecture, and specific assets to assets serving only specific needs.

- "Civil engineering" and "cables" are understood here in a broad sense. Civil engineering includes both civil engineering in ducts and on poles and related assets owned by the operator[41]. Cables include cables as well as the various assets they support, such as splices... These should, however, be assets that can be considered as "using civil engineering".
  It is nevertheless specified that, by way of exception, Orange's civil engineering investments underpinning the OLL-CE (GC-BLO in French) offer are not reported as investments in this tab as, with the existence of a regulated cost-based offer, Orange will report the civil engineering leasing cost that it virtually assumes itself at the OLL-CE offer leasing rate in the "OPEX"[44] tab. The same principle applies to Orange with regard to the hosting of equipment at the OCN.
- The "Other" section is used to assemble the costs of other assets on the optical local loop such as network node elements (OCN, CP, OCP).
- The "Specific assets" section is used to report assets related to architectural adaptations specific to certain offers, such as "FttE" type offers whose costs must be excluded from the calculation of the cost of using the standard architecture. Mobile antenna connection box (or "BRAM" in French) assets shall also fall into this category.

For each these categories, a distinction shall be made between direct costs on the one hand, and indirect (or indirect and common) costs on the other. The concept of overhead cost may raise questions of interpretation. In Decision No. 06-1007, although overhead costs are defined (p. 18) by a form of causality that is less immediate than direct costs, the distinction made in practice is rather between "network costs" and "overhead costs"(p. 23). Such a distinction between direct and overhead/indirect costs seems relevant: in fact, there are various types of overhead expenses (e.g. buildings, IT, vehicles, etc.), and different operators can have quite varied overhead cost structures.

For every network segment, Arcep wants to be informed of the share of CAPEX acquired from companies related to the entity (e.g. companies belonging to the corporate group). In the case of a significant percentage of that share, it may be useful to verify whether the services purchased from such entities are purchased under market conditions.

Principle: clarifications

All CAPEX used for the FttH network shall be reported, regardless of the use of the assets. In particular, in the event of CAPEX in a given asset used both for the FttH network and for other uses, the entirety of CAPEX shall be reported to the Authority, and details on the uses shall then be available in the "Network uses" tab (see below). The thus entered CAPEX shall not be the result of an usage-based allocation, as this usage may change over time.

In particular, any CE (civil engineering) or cable section shall be reported in full (and not as a proportion), even if it is only used partially by the FttH network, bearing in mind that the respective use by FttH and other applications shall be indicated in the "Network uses" tab.

A practical difficulty can arise for CAPEX, as it concerns the treatment of old assets (e.g. civil engineering built many years ago), or assets used to an only minor degree for FttH. In this case, Arcep foresees two possible treatments:

[41] It thus also includes the sleepers of the common supports owned by the operator.

- in the case of an asset "converted" for FttH: the asset may be counted as an investment at its residual net book value, or using another relevant methodology to be defined by the operator;
- in the case of an asset used to an only minor degree for FttH: the use of the asset could be presented as OPEX (depreciation percentage)

In both cases, the treatment applied shall be reported explicitly and in a quantitively detailed manner in the documentation attached to the tables.
The table shall present all the deployment expenses incurred by the operator year by year, regardless of their accounting treatment.

This means, for example:

- an operator whose accounting CAPEX after deduction would be co-financing for the year shall report all of its gross investment expenditure (before co-financing)
- a building operator that treats terminal connection construction expenditures as operating expenses shall present them as such in the "CAPEX" tab.

Finally, this "CAPEX" tab shall not contain acquisitions of network elements from other operators, which must be entered in the "Acquisitions-disposals" tab.

Nomenclature

SECTION 1 : a generic model for the four network segments (fixed model)

SECTION 2 : a detailed model whose lines may depend on the operator (non-fixed model)

- The level of detail must at least distinguish, on separate lines (these distinctions being cumulative):
  - Assets with differing useful lives
  - Assets that cannot be grouped into a homogeneous category by their nature or by their use, even if their useful life is identical
  - Assets that are used differently depending on the offers (their use by the offers shall be identified in the "Network uses" tab by virtue of the principle of relevance[42]), and particularly those used by certain offers but not others, such as dedicated FttE assets, for instance.
- For each network segment, the total reported in accordance with section 2 shall be equal to the total assets reported in accordance with section 1.

SECTION 3 : Details of costs by type of terminal connection

- In this section, the details of the costs of the terminal connection shall be represented, with as many lines as there are identifiable types of terminal connection (in particular, at least as many categories must be distinguished as (i) the usual distinctions of indoor/room/façade/overhead or other; (ii) prices charged by the operator, if they go beyond the categories mentioned in (i); (iii) distinctions in the types of prices for purchase by the building operator[43]). Specific terminal connections shall also be distinguished (e.g. downstream connection from the OCP to another termination point on the operator's network, such as a mobile antenna)[47].

[42] "The costs must be borne by the operators that induce them or use the corresponding infrastructures or services" (Decision No. 2009-1106)

[43] In particular, some operators charge equalised sale prices in some cases, but corresponding to prices for different purchases.

[47] E.g.: "BRAM" in Orange's reference offer in less densely populated areas.

CAPEX – Investment expenditures

Monetary unit: k€

SECTION 1 – SUMMARY

				Observations (*)	Before 2006	2006	…
Hosting at the OCN	**STANDARD ARCHITECTURE ASSETS**				*X+Y+Z*		
		Civil engineering			*X*		
		of which direct costs					
		of which overhead costs					
		Cables			*Y*		
		of which direct costs					
		of which overhead costs					
		Other			*Z*		
		of which direct costs					
		of which overhead costs					
	SPECIFIC ASSETS				*T*		
		of which direct costs					
		of which overhead costs					
	TOTAL				*X+Y+Z+T*		
	of which acquired from related parties						
Transport	**…**	…					
Distribution	**…**	…					
Terminal connection	**…**	…					

(*)In case of use of allocation keys or significant restatements, list them – details shall be provided in (i) the allocation keys tab (ii) the documentation to be attached

SECTION 2 – DETAILS							
			Useful life	Observations (*)	Before 2006	2006	…
Hosting at the OCN	**STANDARD ARCHITECTURE ASSETS**						
		Civil engineering					
		of which Underground					
		of which Poles					
		…					
		Cables					
		of which Cables					
		Other					
		of which CP					
		of which OCP					
		…					
	SPECIFIC ASSETS						
		of which FttE specific cables					
		of which EOP					
		…					
	TOTAL						
Transport	**…**	…					
Distribution	**…**	…					
Terminal connection	**…**	…					

SECTION 3 – TERMINAL CONNECTION BY TYPE							
				Observations	Before 2006	2006	…
Terminal connection		Total					
		of which indoor OCP (*)					
		of which in-room OCP (*)					
		of which OCP on the façade (*)					
		of which overhead OCP (*)					
		Of which…					
(*)Segmentation between categories may depend on the operator (see wording in the Decision)							

Figure 2 – CAPEX tab[44]

4 Acquisition and disposal transactions tab

In this tab, the operator shall provide general information related to any acquisition or disposal of network assets, the work units involved in these operations, as well as the resulting changes in book value (gross and net values).

Principles

The purpose of this tab is to trace four types of information in a standardised fashion in the event of a network acquisition or disposal operation:

- General information related to the transaction
- Information on the assets transferred:
  - Work units
  - Gross book values
  - Net book values

The work units listed must correctly describe the scope of the assets being purchased. This includes a description of the standard work units requested by Arcep in the “Work units” tab and the specific work units to be reported by the operator corresponding to significant costs and not to the standard work units.

[44] In this and the following figures: (i) the elements in red indicate sections that may depend on the operator; (ii) the ellipses in black online (...) indicate that what is presented for the first network segment is repeated in the table attached to the present Decision for the other network segments; (iii) the ellipsis in the last column reflects the fact that the reporting table attached to the Decision is extended for subsequent years.

In particular, it is expected that the sum of the product of the work units by their cost or unit price (replacement cost) shall make sense and correspond to the (replacement) cost of the network scope transferred in the operation.

N.B.

It should also be noted, as described in section 6.3.2, that in the event of a partial transfer of a network, the transferring operator shall provide Arcep with two files containing the different tabs: one corresponding to the retained scope, the other corresponding to the transferred scope.

Network acquisition and disposal transactions					
Currency unit: k€					
SINGLE SECTION					
			Operation number	**1**	**2**
General Description			Title of the operation	*Operation 1*	…
			Description of the operation		
			Type of operation		
			Name of the other party to the transaction		
			Date of Change of Ownership		
			Purchase or sale price		
			Payment date (*)		
			Other observations		
Units of work concerned	**OCN Hosting**		m²		
	Transport	Civil engineering	km of own civil engineering		
		Cables	Number of MPs made available		
			km of OCN-SAP cables		
		Other	Number of OCNs		
	Distribution	Civil engineering	km of own civil engineering		
		Cables	Number of premises programmed		
			Number of connectable rooms		
			km of OCN-SAP cables		
		Other	Number of external SAPs made available		
			Number of indoor SAP made available		
			Number of OCPs		
	Terminal connection	Civil engineering	km of own civil engineering		
		Cables	Number of rooms connected		
			km of SAP-ONT cables		
Change in gross value	**OCN Hosting**	Civil engineering	k€		
		Cables	k€		
		Other standard architecture	k€		
		Other specific	k€		
	Transport	…	k€		
	Distribution	…	k€		
	Terminal connection	…	k€		
Change in net worth	**OCN Hosting**	Civil engineering	k€		
		Cables	k€		
		Other standard architecture	k€		
		Other specific	k€		
	Transport	…	k€		
	Distribution	…	k€		
	Terminal connection	…	k€		
Specific work units	depending on the operator	depending on the operator	depending on the operator		
	depending on the operator	depending on the operator	depending on the operator		
(*) In the case of payment in several instalments, provide details in the comments or attached documentation					

Figure 3 – Acquisitions-disposals tab

5 Operating Expenses (OPEX) Tab

The purpose of this tab is to identify the operating expenses corresponding to the network segments and optical fibre local loop assets and the provision of passive access offers to these networks.

Principles

The reporting of OPEX linked to the FttH network distinguishes:

- OPEX attributable to network elements (e.g. operation, maintenance)

- OPEX directly attributable to offers (e.g. after-sales service, order-delivery)

Such a distinction corresponds to what is practiced in asymmetric regulatory accounting[45] .

Reporting of OPEX attributable to network elements

- The segmentation used is identical to the one used for CAPEX:
  - Same network segments (OCN hosting, transmission, distribution, end-connection)
  - Same breakdown by asset class: standard assets (including civil engineering, cables and other assets), specific assets
- To wit:
  - As offers are available by network segment (OCN-CP, CP-OCP, etc.), the principle of relevance requires this distinction by segment
  - Within the same network segment, an asset class does not necessarily have the same use: for example, civil engineering could be used for other offers (e.g. leasing civil engineering to third parties), specific assets that are only used for specific uses (e.g. assets dedicated to businesses applications)
- In this segmentation, the leasing of civil engineering space is an OPEX attributable to "cables" and not to "civil engineering". The OPEX attributable to civil engineering are only those attributable to civil engineering owned by the operator.
- In view of the asymmetric obligations applicable to Orange, and in particular the existence of a cost-based regulated civil engineering offer and equivalence of inputs, Orange, by way of exception, instead of reporting in the "civil engineering" category the OPEX related to the operation of its regulated civil engineering, shall report in the appropriate categories (e.g. "cables" or "specific assets") the OPEX corresponding to the cost of leasing civil engineering borne virtually by the OLL-CE[46] leasing price. These virtual expenses shall be clearly identified and their calculation documented.

Reporting of OPEX attributable to offers

- For reporting by offers, according to the asymmetric account reporting model, two main categories are distinguished: (i) OPEX related to disposals and commissioning[47], (ii) OPEX related to after-sales service[48], (iii) and an "other" category being provided for other cases if necessary. Two tables are provided for this purpose: the first, whose structure is fixed, is designed to obtain the total of these costs covering the scope of reporting, while the second, whose structure can be adapted to the operator's list of offers, aims to obtain the details of these costs for each offer.

For every network segment and for the total OPEX related to the offers, as is the case for CAPEX, the share of the OPEX spent with enterprises with ties to the entity (e.g. belonging to the corporate group) is requested. It may be useful to verify whether the services purchased from such entities are purchased under market conditions.

[45] In the case of unbundled access to the copper local loop (G-DEGTABO wholesale product), Orange distinguishes between the copper pair costs (PT_ACC_PAIRE_BL), which are identical (per pair) for all user offers, and after-sales service costs (R_7_SAV_CLIENT), the use of which depends on the offers. https://www.orange.com/sites/orangecom/files/documents/2020-06/Catalogue-cl%C3%A9s-r%C3%A9seau-2018.pdf or description of cost system: https://www.orange.com/sites/orangecom/files/documents/2020-06/Description_couts_2018.pdf

[46] Which also covers the asset costs incurred by Orange to provide this OLL-CE (GC-BLO in French) offer

[47] "LIV" in Orange's regulatory cost model

[48] "After-sales service" in Orange's regulatory cost model

OPEX – Operating expenses

Currency unit: k€

SECTION 1 – NETWORK-RELATED OPEX

			Comments (*)	Before 2006	2006	…
Hosting at the OCN						
	Attributable to the civil engineering itself			*X*		
		of which indirect and common costs				
	Attributable to cables and other standard architectural elements			*Y*		
		Civil engineering leasing				
		Operation/maintenance				
		Taxation				
		of which IFER				
		Other direct costs				
		Other indirect and common costs				
	Attributable to other specific items			*Z*		
		of which indirect and common costs				
	TOTAL			*X+Y+Z*		
	of which expenses with related parties					
Transport	…	…				
Distribution	…	…				
Terminal connection	…	…				
(*) mention, in particular, the main allocation rules						

SECTION 2 – OPEX RELATED TO OFFERS

SECTION 2a – TOTAL

		Comments	Before 2006	2006	…
	Marketing and delivery				
	of which direct cost				
	of which indirect and common cost				
	After-sales service				
	of which direct cost				
	of which indirect and common cost				
	Other				
	of which direct cost				
	of which indirect and common cost				
	TOTAL				
	of which expenses with related parties				

SECTION 2b – BY OFFER

		Comments	Before 2006	2006	…
Offer 1	Marketing and delivery				
Offer 1	After-sales service				
Offer 1	Other				
Offer 1	**TOTAL**				
Offer 2	Commercialization				
Offer 2	After-sales service				
Offer 2	Other				
Offer 2	**TOTAL**				
…					

Figure 4 –OPEX tab

6 Revenue tab

In this tab, the operator shall allocate the revenues attributable to the shared optical local loop network by network segment and by offer. The "internal" revenue, corresponding to the internal sales to the operator (history), as well as the work units underlying the revenue shall also be reported.

Principles

- Revenues shall be broken down and cross-referenced: (i) by offer and (ii) by network segment.
    - The allocation of revenues by network segment can be direct (e.g. OCN-CP link access offer) or indirect in the case of an offer using several network segments. In the latter case, as the price of an A+B offer is normally the sum of the price of offer A and the price of offer B, the revenue shall be reallocated by the operator according to this principle. The operator shall explain the revenue allocation in its explanatory datasheet.
    - An "other" segment makes it possible to address offers whose revenues include, for their formation, the FttH network that is the subject of the reporting, and network elements external to this reporting: in this case, the offer's total revenues shall be reported, and broken down, first, between the different FttH network segments and, second, and the "other" segment for all residual items. This type of case which, *a priori,* is quite scarce, shall have to be precisely documented by the operator so that the Authority can ensure that there are no distortions in the revenue allocation.
    - By offer, it is understood to distinguish, according to industry standards, the main types of offer. In particular, co-financing offers shall have to be distinguished from leasing offers. Offers of access to one network segment must be distinguished from offers of access to another network segment or offers of bundled access to several network segments. Offers using specific architectural elements shall be distinguished from offers using standard architectural elements. On the other hand, there is no provision requiring this reporting to include a distinction between *a priori* and *a posteriori* access offers to the same network segment.
- To be consistent with the objectives of price supervision, revenue reporting shall take three elements into account:

    1. First, for the purpose of price supervision, the reported revenue must be able to be assimilated to cash flows: when the accounting treatment of expenses or revenue deviates significantly from the cash flows borne by the operator[49], restatements with regard to accounting turnover shall be necessary, which shall be explained by the operator.

    The following shall be presented as revenue for the year:

    - Co-financing received (even if it is treated, for example, by the BO in its social accounts for all or part of it as a deduction from investments, deferred revenue, etc.)
    - Tariffs such as service access fees or similar elements (even if they are subject to specific treatment under IFRS 15, for example, in the operator's accounts)

    The following shall be presented: (i) accounting turnover, (ii) restatements, (iii) revenue, i.e. the restated turnover (i) + (ii).

    The methodology for retreatment shall be clearly explained in the methodological note.

    2. Next, the penalties (paid by both the operator to the customers and by the customers to the

[49] The mere effect of the classic discrepancies between invoicing and collection is not considered to be a significant difference requiring restatement.

operator) shall have to be identified. It should be noted that, as with the practice in asymmetric regulation, it is requested that the penalties paid to client operators be reimbursed not in costs but in the reduction of revenues.

The following shall thus be presented: (i) revenue, corresponding to restated turnover (see above),(ii) penalties charged, (iii) penalties conceded, and (iv) revenue excluding penalties.

3. Finally, revenue excluding penalties shall be divided between: (i) revenue corresponding to the basic subscription of the offers (ii) revenue from options (e.g. guaranteed recovery time option). For the purposes of price supervision, it is necessary to be able to track both all revenues, but also the revenues corresponding to the basic subscription.

- The "internal" revenue, i.e. internal to the legal entity corresponding to virtual sales, shall also be reported, according to the same breakdown, in separate lines: this is the revenue that would have been received if the legal entity reporting the accounts had been dissociated into two legal entities: one providing access to the network, the other carrying out downstream (aka retail) activities.
- For every offer, the quantity of work units sold corresponding to the revenue presented[50] shall be indicated, using the model of what is achieved in the operating accounts produced in asymmetrical regulatory accounting. It is thus expected that the revenues, excluding penalties and options, of the offer for year N are equal to WU* [Average price for the year], modulo of the second-order reconciliation effects[51], where the WU is the work unit (quantity sold over the year) for year N and [Average price for the year] is the average price in force in year N.

[50] Typical examples of work units in typical reference offer structures: in the CP-OCP segment: number of active customers; for OCN-CP: km of active fibres

[51] In general, this approximation of the calculation of annual revenue does not hold true exactly, for several reasons which may be combined: for example, a non-constant sale of WUs during the year combined with a variation in the tariff during the year (average(a)*average(b) <> average(a*b)). In addition, some offers may present prices that are not proportional to the main WU (e.g. by WU category with significant threshold effects – e.g. certain prices such as for the OCN-CP segment for some operators). The operator shall be expected to present the most relevant work unit.

Revenue					
Currency unit: k€					
SECTION 1 – SUMMARY					
			Before 2006	2006	…
Hosting at the OCN	**Recurring**	**External turnover (accounting)**	*1*		
		Restatements (*)	*2*		
		Comments on restatement(s)			
		Retired external revenue	*3 =1+2*		
		of which penalties conceded	*4*		
		of which penalties charged	*5*		
		External revenue excluding penalties	*6=3-4-5*		
		of which basic subscriptions			
		of which options			
		Internal revenue (history)			
		of which penalties conceded			
		of which penalties charged			
		Internal revenue excluding penalties	*7*		
		of which basic subscriptions			
		of which options			
		Total internal + external revenue excluding penalties	*8=6+7*		
		of which basic subscriptions			
		of which options			
	Non-recurring	**External turnover (accounting)**			
		Restatements (*)			
		Comments on restatement(s)			
		Retired external revenue			
		of which penalties conceded			
		of which penalties charged			
		External revenue excluding penalties			
		of which basic subscriptions			
		of which options			
		Internal revenue (history)			
		of which penalties conceded			
		of which penalties charged			
		Internal revenue excluding penalties			
		of which basic subscriptions			
		of which options			
		Total internal + external revenue	*9*		
		of which basic subscriptions			
		of which options			
	TOTAL	**Total internal + external revenue**	*10=8+9*		
Transport	**…**	**…**			
Distribution	**…**	**…**			
Terminal connection	**…**	**…**			
Other (**)	**…**	**…**			
(*) To be detailed in the comments and/or in the attached documentation – e.g. revenue corresponding to co-financing received but not treated as revenue in the case of revenue that is recognised in the accounts in a staggered manner but earned at the outset					
(**) Corresponds to revenues, where applicable, attributable to network elements that do not fall into the 4 categories of reporting (OCN hosting, transmission, distribution, terminal connection)					

Figure 5 – Revenue tab (section 1)

SECTION 2 – BREAKDOWN BY OFFER					
			Before 2006	2006	...
TOTAL (***)	**TOTAL**		*A = A1+A1'+A2+ ... = AA + ... + AE*		
Offer 1	**Recurrent**	**Retired external revenue**	*11*		
		of which penalties conceded	*12*		
		of which penalties charged	*13*		
		External revenue excluding penalties	*14=11-12-13*		
		of which basic subscriptions			
		of which options			
		Internal revenue (history)			
		of which penalties conceded			
		of which penalties charged			
		Internal revenue excluding penalties	*15*		
		of which basic subscriptions			
		of which options			
		Total internal + external revenue excluding penalties	*A1 = 14 + 15*		
		of which basic subscriptions			
		of which options			
	WU - Recurring	WU sold external: quantity			
		WU sold externally: name			
		Internal Sold WU: Quantity			
		WU sold internal: name (****)			
		WU sold - total			
	Non-recurring	**Retired external revenue**			
		of which penalties conceded			
		of which penalties charged			
		External revenue excluding penalties			
		of which basic subscriptions			
		of which options			
		Internal revenue (history)			
		of which penalties conceded			
		of which penalties charged			
		Internal revenue excluding penalties			
		of which basic subscriptions			
		of which options			
		Total internal + external revenue excluding penalties	*A1'*		
		of which basic subscriptions			
		of which options			
	WU – non-recurring	WU sold external: quantity			
		WU sold externally: name			
		Internal Sold WU: Quantity			
		WU sold internal: name			
		WU sold - total			
Offer 2 ...	**...**	**...**			
Hosting at the OCN	**TOTAL**		*AA*		
Offer 1	**Recurrent**	**External revenue excluding penalties**			
		of which basic subscriptions			
		of which options			
		Internal revenue excluding penalties			
		of which basic subscriptions			
		of which options			
		Total internal + external revenue excluding penalties	*AA1*		
		of which basic subscriptions			
		of which options			
Offer 1	**Non-recurring**	**External revenue excluding penalties**			
		of which basic subscriptions			
		of which options			
		Internal revenue excluding penalties			
		of which basic subscriptions			
		of which options			
		Total internal + external revenue excluding penalties	*AA2*		
		of which basic subscriptions			
		of which options			
Offer 2...	...	...			
Offer 1	**Recurrent**	**External revenue excluding penalties**			
Transport	**...**	...	*AB*		
Distribution	**...**	...	*AC*		
Terminal connection	**...**	...	*AD*		
Other (**)	**...**	...	*AE*		
(**) Corresponds to revenues, if applicable, attributable to non-reported network elements					
(***) Total = OCN hosting + transmission + distribution + terminal connection + other					
(****) Use the same work unit for internal and external revenue					

Figure 6 – Revenue tab (section 2)

4. Resale rights tab

The purpose of this tab is to indicate the financial transfers between commercial operators managed by the building (aka infrastructure) operator under certain provisions of the building operators' FttH network access offers.

Principle

- "Resale rights" means any financial transfer system between the BO's client operators (including the BO itself as a commercial operator, in this case without a "cash" transfer for internal sales) managed by the BO. This can therefore concern both the resale rights provided for in the context of the co-financing on the OCN-CP and CP-OCP segments, but also those related to churn (on the terminal connection), when a customer switches operator.
- The "Total Receipt-Paid" verifies that the BO is only playing a role of "fund" role (the resale rights must cancel each other out).
- Three flows shall be distinguished: with the operator itself (virtual flows), with the corporate group's third-party enterprises, with third-party enterprises outside the group.

Resale rights						
Monetary unit: k€						
SINGLE SECTION						
				Before 2006	2006	...
	Hosting at the OCN	Receipt		*3 = 1 + 2*		
			Receipts – from third-party companies (actual flow)	*1*		
			of which group companies			
			of which non-group companies			
			Receipts – internal (from the same company) (replenished)	*2*		
		Paid		*6 = 4 + 5*		
			Paid – to third-party companies (actual flow)	*4*		
			of which to companies in the group			
			of which to non-group companies			
			Paid – internally (to the company) (flow history)	5		
		Total Received - Paid		3 – 6		
	Transport	...	...			
	Distribution	...	...			
	Terminal connection	...	...			

Figure 7 – Resale rights tab

5. Network Work Units tab

The purpose of this tab is to provide a quantitative description of the network's assets.

Principles

- For every network segment of the local loop, operators shall provide standardised work units corresponding to standard civil engineering, cables and other assets (Section 1), specific work units (Section 2) not included in the list of such standard work units, and work units related to the terminal connection (Section 3).
- The specific work units, which may depend on the operator, may be of two types:
    - Work units linked to standard assets, beyond standard work units: the operator may consider it relevant to report certain work units to enable a better understanding of its network costs, although these work units shall always correspond to the network's standard architecture.
    - Work units linked to specific assets, in particular linked to specific architectures for particular uses, such as architectures with adaptation allowing for an increased quality of service (see "CAPEX" section).

- Finally, work units related to the terminal connection must be reported using the same breakdown of terminal connection type as the terminal connection investments.
- To meet specific needs (e.g. business customers), an operator may be required to use standard assets (OCN-CP cables) for one part of the network (e.g. transport), and specific assets for another part of the network (e.g. dedicated access for businesses downstream from a "distribution point" type intermediate point in Orange's architecture).
- The reported value corresponds to the value of the work unit at the end of the fiscal year (31 December for fiscal years ending 31 December).

Network's work units

SECTION 1 – STANDARDISED WORK UNITS

	Network Segment	Category (CE / Cables / Other)	WU Description	Before 2006	2006	…
	Hosting at the OCN		m²			
	OCN-CP	Civil engineering	km of own civil engineering			
		Cables	Number of MPs made available			
			km of OCN-CP cables			
		Other	Number of OCNs			
	CP-OCP	Civil engineering	km of own civil engineering			
		Cables	Number of premises programmed			
			Number of connectable rooms			
			km of CP-OCP cables			
		Other	Number of external CPs made available			
			Number of indoor CP made available			
			Number of OCPs			
	OCP-ONT	Civil engineering	km of own civil engineering			
		Cables	Number of rooms connected			
			km of OCP-ONT cables			

SECTION 2 – SPECIFIC WORK UNITS

	Network Segment	Category (CE / Cables / Other)	WU Description	Before 2006	2006	…
	CP-OCP	Other	Number of FttE distribution boxes			
	CP-OCP	Other	Number of ERP (Enterprise Connection Point)			
	…					

SECTION 3 – SPECIFIC WORK UNITS TIED TO THE TERMINAL CONNECTION

	Network Segment	Category (CE / Cables / Other)	WU Description	Before 2006	2006	…
	Indoor type OCP-ONT		Number of rooms connected			
	In-room type OCP-ONT		Number of rooms connected			
	Façade type OCP-ONT		Number of rooms connected			
	Overhead type OCP-ONT		Number of rooms connected			
	…		Number of rooms connected			

Figure 8 – WU Tab

6. Network uses tab

The "Network uses" tab provides information on the use of the network by the various offers marketed by the operator for every category of asset in the shared network.

Table structure

- In section 1, all of the uses of every "standard" network element must be reported, regardless of whether the use is regulated. This is to avoid "double counting".

For civil engineering, the proposed use at this stage is volume or length, as per the operator's choice. The recommendation is to report volume-based use, in keeping with the billing unit applicable to the Orange CE-OLL (GC-BLO) offer for deployments, and because this use takes better account of network saturation and load issues, in the case of overhead civil engineering.

- For cables, two work units are provided for: the number of occupied fibres and the kilometres of occupied fibres. Pricing systems can, in practice, be per fibre or per fibre length, requiring both measures to be accounted for. However, in the case of the CP-OCP and OCP-ONT segments, only the number of occupied fibres unit can generally be entered, as pricing schemes do not typically employ the length of occupied fibres.

- Section 2 provides two additions:
  - In terms of level of detail: First, these same uses shall be broken down by offer (distinguishing between internal and external sales). The "offers" shall be the same as those in the "Revenue" tab, thus taking into account all the uses of these network elements
  - In terms of scope: Uses corresponding to assets not listed in section 1, whether they are "standard" or "offer-specific" assets, shall be added. It should be noted that, in the CAPEX tab, Section 2 stipulates that as many assets are there are allocations of use will be distinguished. In this section, the use of each of these assets shall be indicated by offer. This creates the ability to monitor compliance with the principle of relevance.
  - Finally, special treatment is reserved, in Section 2, for the "civil engineering" asset: its use is not allocated directly by offer, but between (i) FttH network cables, primarily, (ii) where applicable, offers of third-party access to this civil engineering. This allows an indirect calculation of the use of civil engineering by the different offers. This treatment draws on the layered transfer model used by Orange[56].
- Uses shall be reported as an annual average for the year, which enables a comparison with revenue for the year.

Network uses						
SECTION 1 – STANDARDISED USES						
Segment		Active	Measurement of usage	Before 2006	2006	…
OCN Hosting			m² occupied			
Transport		Operator Civil Engineering	Length (km) of cables deployed (*)			
			Volume (m.cm²) of cables deployed (*)			
		Cables	km of occupied fibres			
		Cables	Number of fibres occupied			
Distribution		Operator Civil Engineering	Length (km) of cables deployed (*)			
			Volume (m.cm²) of cables deployed (*)			
		Cables	km of occupied fibres (**)			
		Cables	Number of fibres occupied			
Terminal connection		Operator Civil Engineering	Length (km) of cables deployed (*)			
			Volume (m.cm²) of cables deployed (*)			
		Cables	km of occupied fibres (**)			
		Cables	Number of fibres occupied			
(*) The operator can choose to report either the length or the volume						
(**) This box is not requested for this network segment, unless the principle of relevance makes it useful in the particular case of the operator						

[56] See Decision No. 06-1007, section II-2.3.3

SECTION 2 – USES BY OFFER AND USES OF SPECIFIC ASSETS

Active	Offer	External /Internal sales	Measurement of usage	Before 2006	2006	…
Hosting at the OCN						
Hosting	Offer 5	External	m² occupied			
	Offer 5	Internal	m² occupied			
	…					
Transport						
Civil engineering	Cables	N/A	Length/Volume of deployed cables			
	Offer 3	External	Length/Volume of deployed cables			
	Offer 3	Internal	Length/Volume of deployed cables			
Cables	Offer 1	External	km of occupied fibres			
	Offer 1	Internal	km of occupied fibres			
	Offer 2	External	km of occupied fibres			
	Offer 2	Internal	km of occupied fibres			
Cables	Offer 1	External	Number of fibres occupied			
	Offer 1	Internal	Number of fibres occupied			
	Offer 2	External	Number of fibres occupied			
	Offer 2	Internal	Number of fibres occupied			
	…					
Distribution						
Civil engineering	Cables	N/A	Length/Volume of deployed cables			
	Offer 3	External	Length/Volume of deployed cables			
	Offer 3	Internal	Length/Volume of deployed cables			
Cables	Offer 1	External	Number of fibres occupied			
	Offer 1	Internal	Number of fibres occupied			
	Offer 4	External	Number of fibres occupied			
	Offer 4	Internal	Number of fibres occupied			
ERP	Offer 4	External	Number of active customers			
	Offer 4	Internal	Number of active customers			
	…					
Terminal connection						
Civil engineering	Cables	N/A	Length/Volume of deployed cables			
	Offer 3	External	Length/Volume of deployed cables			
	Offer 3	Internal	Length/Volume of deployed cables			
Cables	Offer 1	External	Number of fibres occupied			
	Offer 1	Internal	Number of fibres occupied			

In the example above:
- Offer 3 is, for example, an offer for access to the operator's civil engineering (e.g. in the context of the application of the BB cost Directive, for ROLL, etc.) or an offer of ROLL on dedicated cables
- Offer 1 covers transmission, distribution and terminal connection; offer 2 only covers transport, offer 4 only distribution and uses ERP
- Offer 5 is an hosting offer
- EOP is the case of a specific asset that shall only be used by FttE offers

Figure 9 – Uses tab

7. Allocation keys tab

The "Allocation keys" tab lists the allocation keys the operator uses, when applicable, to complete the other tabs.

Principle

As set out in Section 6.3.2 of the present Decision, the information reported shall come as directly as possible from the operator's cost accounting, but allocation keys may be used when such is not the case.

The purpose of this tab is to provide details on all of the allocation keys used.

Structure

The different "origin"= >"target" transfers reported using a key are listed. For these transfers, the following are reported: the definition of the "origin" item allocated (before key), the definition of the key, the transferred items, the unit of the key's numerator and denominator of the key, as well as the methodological observations.

These elements must be presented in a clear and unambiguous manner. If the "observations" box is insufficient to correctly present the key used, the operator can provide additional details in the datasheet attached to the submitted tables.

As the choice and implementation of allocations may have a significant impact on the accounting elements reported, the Authority may, if necessary, ask the operator for the numerical values of certain keys used (amount of the item paid, numerator of the key, denominator of the key, value of the key)[52]. Even if an annual reporting of these values is not requested, the operator shall keep track of them, in accordance with the principle of auditability of the data described in section 6.3.5.

Allocation keys					
SINGLE SECTION					
Fiscal year	Amount to be allocated	Key and transfer			
Fiscal year	Definition of the allocated item (before key)	Key Definition	Transfer item	Definition of the allocated item (before key)	Key Definition
2017	Other operations and maintenance OPEX in VHDA not identifiable by segment of network	Number of hours of labour per network segment	VHDA OCP-CP OPEX	Hours	
2017	Other operations and maintenance OPEX in VHDA not identifiable by segment of network	Number of hours of labour per network segment	VHDA OCP-CP OPEX	Hours	
2017	Other operations and maintenance OPEX in VHDA not identifiable by segment of network	Number of hours of labour per network segment	VHDA OCP-ONT OPEX	Hours	
2017	Other operations and maintenance operations in VHDAs that cannot be identified by network segment	Number of hours of labour per network segment	Other VHDA OPEX	Hours	Other: Corresponds to [explanation]
2018	Other operations and maintenance operations in VHDAs that cannot be identified by network segment	Number of hours of labour per network segment	VHDA OCP-CP OPEX	Hours	
2018	Other operations and maintenance operations in VHDAs that cannot be identified by network segment	Number of hours of labour per network segment	VHDA OCP-CP OPEX	Hours	
2018	Other operations and maintenance OPEX in VHDA not identifiable by segment of network	Number of hours of labour per network segment	VHDA OCP-ONT OPEX	Hours	
2018	Other operations and maintenance OPEX in VHDA not identifiable by segment of network	Number of hours of labour per network segment	Other VHDA OPEX	Hours	Other: Corresponds to [explanation]
...					

Figure 10 – Keys tab[53]

8. Assets chronology tab (provided in the event of a disposal of network assets)

This tab is provided only in the event of a network asset transfer.

Its purpose is to report the assets transferred by the operator, in chronological order.

Table details

- Unlike most tabs, this table is not a chronicle but a status report, with the years representing the date when the various assets became operational.
- The stock of gross value by age, on the date of the sale, corresponding to the transferred assets, shall be completed with the same level of detail as in the "CAPEX" tab (including the detailed sections).

[52] Example of key and values: an "origin" expense of €10K can be allocated via a key to the hours spent on five "target" workstations. If the total number of hours is 140,000 and the number of hours corresponding to target position 1 is 10,000, the value of the allocation key to position 1 is 10,000 / 140,000 or 7%.

[53] As indicated in the commentary in the table attached to the present Decision, the data entered in blue in this tab are provided as an example of the expected format, but are not a requirement for the key to be used.

Assets in use, chronologically (*Tab filled in only in case of sale of network assets)*							
Assets sold, in chronological order, expressed in gross book value - in k€							
SECTION 1 – SUMMARY							
			Observations	**TOTAL**	Before 2006	2006	…
Hosting at the OCN	**STANDARD ARCHITECTURE ASSETS**				*X+Y+Z*		
					X		
					Y		
					Z		
	SPECIFIC ASSETS				*T*		
	TOTAL				*X+Y+Z+T*		
	of which acquired from related parties						
Transport	**…**	**Transport**					
Distribution	**…**	**Distribution**					
Terminal connection	**…**	**Terminal connection**					
Sections 2 and 3: same breakdown as in the"2.CAPEX"tab, sections 2 and 3							
SECTION 2 – DETAILS							
			Observations	**TOTAL**	Before 2006	2006	…
Hosting at the OCN	**STANDARD ARCHITECTURE ASSETS**						
		Civil engineering					
		of which Underground					
		of which Poles					
		Cables					
		Of which…					
		Other					
		Of which…					
	SPECIFIC ASSETS						
		Of which…					
	TOTAL						
Transport	**…**	**…**					
Distribution	**…**	**…**					
Terminal connection	**…**	**…**					
SECTION 3 – TERMINAL CONNECTION BY TYPE							
			Observations	**TOTAL**	Before 2006	2006	…
Terminal connection		Total					
		of which indoor OCP (*)					
		of which in-room OCP (*)					
		of which OCP on the façade (*)					
		of which overhead OCP (*)					
		Of which…					
(*)Segmentation between categories can depend on the operator (see the text of the decision)							

Figure 11 – Assets chronology tab

9. Explanatory note

The operator shall attach an explanatory note in the form of a datasheet to the spreadsheets.

As indicated in section 6.3.6, this datasheet shall specify in particular:

- the definition of the terms that require it in the reporting tables;
- the data sources used;
- the accounting standards and principles used;
- the allocations and adjustments made, if applicable;
- and, more broadly, the methodological choices made in the production of reporting, and any information necessary for the Authority to understand this reporting.

A version of the documentation shall be produced for every fiscal year.