

Contribution of France Telecom/Orange to the public consultation of the ERG on Next Generation Access Regulatory Issues

11 June 2007





Executive Summary

The roll-out of fibre in the local loop in Europe comes in two different kinds:

- Deployments of FTTH or enhanced HFC cable networks :

Favouring such deployments, which are of major importance for the future of European economy, should be the main objective of the European regulatory framework.

For the few years to come, the deployments of FTTH will mostly occur in densely populated areas where they will be obviously pro-competitive:

they are performed simultaneously by both alternative and incumbent operators;

they compete - in overlay mode - not only with ADSL networks - as long as FTTH does not have a large range of very high speed services available for the customers and has not gained a comparable scope – but also with the strengthened cable networks which benefit from key competitive advantages in the race for very high broadband : cheaper and easier upgrade of networks, incumbency in respect of access to content and the existence of a large TV customer base.

FTTH infrastructure competition is made possible amongst other through the choice of G-PON technology which uses the ducts capacity efficiently.

As a consequence, regulating FTTH in dense areas would not only serve no purpose. It would also harm competition in prohibiting the much needed pricing flexibility necessary to make FTTH a successful and profitable business activity, while conflicting with the rationality and legal security needed by investors.

Extension of FTTH and also of HFC cable technology outside of dense areas will happen in due time, but still in an unpredictable way, as the Very High Speed business model has first to establish itself in dense areas in a competitive mode. Therefore there is no point in trying now to define what should be the FTTH regulation in zones where major uncertainties regarding revenues, costs, time and geography do not allow to conclude yet to the sustainability of infrastructure competition. Such pre-emptive regulation would limit the benefit of competition to a substantial part of the market and ultimately harm consumers.

The consultation might have usefully addressed in depth the key issue of internal wiring - and access to the customers' premises - to which the attention and action of NRAs will increasingly be drawn in the future. France Telecom/Orange is in favour of a single open fibre infrastructure in the buildings, and asks for NRAs' intervention towards real estate players to support the roll-out of FTTH.

- Deployment of VDSL technology

Some incumbent operators plan to switch their subscribers from their existing ADSL/local loop networks to new VDSL/sub loop networks. This move constitutes indeed a relevant intermediate step towards Very High Broadband services. Certain plans may however raise regulatory and competition concerns due to their disruptive impact on LLU and ADSL/Bitstream based competition. NRAs should follow these developments with care and if necessary intervene to protect competition. The existing European regulation gives NRAs all the necessary tools to encourage and enforce if necessary a level playing field between operators in a VDSL context. The focus of NRAs' intervention should be on guaranteeing a fair transition, satisfactory economic conditions and differentiation possibilities for competitors using LLU and bitstreams.

As a matter of conclusion, the future framework should unambiguously assert the pro-competitive character of FTTH investments and NRAs should refrain from pre-emptive regulation in this respect.





The scope of the existing Recommendation on relevant markets combined with the provisions of the Access Directive perfectly enables NRAs to intervene in all aspects of fibre roll-outs. Especially there is no merit to the consideration that the Market 11 should be made technologically neutral as this would serve the only purpose of regulating a market of access to networks that are built in a competitive environment. Usage of duct-efficient technologies such as G-PON or HFC compares well with point to point architectures and will allow infrastructure competition.





France Telecom/Orange welcomes the possibility to contribute to ERG's public consultation on Next Generation Access Regulatory Issues launched on 7 May 2007¹ and proposes its answers hereafter to the consultation questions.

1. Do you agree/disagree with the general approach?

The consultation tries to capture in a unique approach FTTH and VDSL (FTTB and FTTC) roll-outs. Furthermore it ignores the upgrade of HFC cable networks for Very High Speed services which is currently under way in most countries. France Telecom suggests a differentiated approach taking into account the competitive and regulatory issues attached to the two technological approaches:

- Current or foreseeable FTTH roll-outs are clearly pro-competitive and represent a major opportunity to consolidate the competition that has been established already in broadband markets; there is therefore no need to review the current EC Recommendation on relevant markets in this respect;

- VDSL roll-outs rely to a more or large extent on the regulated copper networks. Arising competitive or regulatory issues can be dealt with by NRAs, if necessary, within the current regulatory framework and in the present status of the Recommendation on relevant markets.

A. Current and announced FTTH roll-outs will significantly strengthen competition as these investments are performed in a competitive mode by multiple operators and face competition with other platforms. Ex ante regulation of FTTH would be not only useless in absence of competitive concern, but would deter investments in the first place or limit those to small islands, thus depriving large categories of customers from the benefits of Very High Speed

The EC's 12th Implementation Report stresses that FTTH represents a major opportunity for alternative operators while incumbent operators concentrate only 2% of existing European FTTH accesses in the European Union. New entrants also have the lion share of existing FTTH projects². The often invoked threat of re-monopolisation in the FTTH roll-out has little substance.

Contrary to VDSL, FTTH is deployed without replacing the existing networks such as the copper loop, without any impact on the continuity of the unbundling services. Not only adding to the existing networks, FTTH offers will therefore develop under the continuing competitive pressure of ADSL and cable services. The competitive advantages of FTTH offers compared to ADSL offers will only be decisive in the long run as a large range of specific Very High Speed services is becoming available. This will depend on the global Very High Speed Services HFC and FTTH customer base which in turn will grow only progressively. The commercial advantage of FTTH and of upgraded HFC over ADSL, as seen by the customer, will grow only progressively. Therefore there is neither technical nor commercial disruption in ADSL business due to FTTH roll-out, and FTTH offers will only penetrate the market if they provide a very good value for the customer.

In the few coming years, FTTH roll-outs will mostly occur in densely populated areas. In those areas, cable operators are in an extremely strong position to address the market of very high speed access. Extension of FTTH in less dense areas, this question will only be considered on a sound basis after enough knowledge on the economics of Very High Speed services has been gathered on dense zones.

In terms of services, Very High Speed access paves the way for the integration of HDTV bundled with Internet and inter-personal communication, progressively supplemented by the yet unknown innovations the new technology will support. Cable operators are in a strong position, building on key competitive advantage to address this market:

² For instance in France, announced FTTH projects from Free, 9C and Orange-FT Group are of similar magnitude. In zones concerned by FTTH roll outs, 9C and Free have Broadband market shares of the same magnitude than France Telecom/Orange. They have purchased companies having already deployed fibre networks (purchase of CiteFibre by Iliad/Free and Erenis and Mediafibre by 9C). Stock market is confident in their prospects and their access to the market to finance their investments compares with France Telecom/Orange.



¹ Document ERG (07) 16, 7 May 2007



- their networks are already capable of delivering very high-speed services to their customers, while a further upgrade will come at a fraction of the cost incurred by DSL operators to invest in FTTH³;

- they have an incumbent, strong position in terms of access to premium TV and media content that will be the growth engine of very high speed networks;

- the customer base of cable operators is precisely located in the zones where FTTH is planned to be rolled-out for the coming years, and is larger than any single DSL customer base.

Very High Speed access is a unique opportunity for the cable industry to make a strong comeback; this is illustrated by the increasing backing it receives from the financial markets⁴.

The re-monopolization scenario on which the consultations seems to found its regulatory analysis is not realistic in markets where the broadband market is competitive. This scenario is already contradicted by experience. We are concerned that this consultation might derive regulatory recommendations from a preconceived analysis and not from the observation of facts.

France Telecom suggests ERG taking as reference the situation where several FTTH networks are simultaneously rolled out in dense areas, competing with existing DSL offers and competing with the cable operator.

This situation should be of no concern to regulatory authorities. The major risk to such developments would be the intervention of ex-ante regulation deriving new access obligation from existing obligations introduced in the context of copper networks under the pretext of defending "technological neutrality".

<u>B. VDSL – FTTC/B roll-outs may lead to a reduction of the level of competition. Existing European</u> regulation gives NRAs all the tools to prevent such an outcome

VDSL technology (which includes FTTC and FTTB) will be rolled-out by incumbent operators in several European countries. A VDSL roll-out leads sooner or later to a substitution of the existing local loop/ADSL network by a new sub loop/VDSL network⁵. These projects are consequently disruptive for existing alternative operators especially if LLU is no more available at the MDF or if unbundlers cannot compete on a level playing field on VDSL services.

Regulatory intervention is possible and may be necessary within the current definition of relevant markets and under the existing Directives (especially Art. 12 AD): remedies could include sub loop unbundling, access to the street cabinet, MDF backhaul. NRAs should also make sure that operational and economic conditions will ensure continuity of unbundling services and a non-discriminatory level playing field on VDSL services.

2. Do the scenarios describe the relevant roll-out alternatives for NGA?

The description of the relevant roll-out alternatives for NGA in the consultation suffers from an incomplete analysis of four key issues:

a) the consultation wrongly splits between FTTC on the one hand and FTTB/H on the other hand. The correct segmentation should isolate VDSL characterized by bit rate limitations especially for the upstream traffic from FTTH technology. Hybrid-Fibre-Coax networks which can propose services equivalent to those on FTTH ones and which are the incumbent network for Very High Speed services should be included in the analysis. As shown in the answer to question 1, FTTH (a) is rolled-out as an overlay of the existing network, (b) has a slow start in Europe, the majority of the projects being

⁵ Technically, specific versions of VDSL at the subloop can now coexist without interferences with ADSL at the MDF. But economically the incumbent operator will maximise the utilisation of its VDSL-DSLAM by trying to switch all its ADSL subscribers to its VDSL services.



³ UPC France currently sells 100Mbps packages and will be able to address 5 million homes by the end of 2008 at speeds between 200 and 300 Mbps.

⁴ The French cable operator has been acquired by Cinven, an investment fund which brought several billion fresh Euros to support massive network, service and commercial investments.



initiated by new entrants, (c) strengthens competition as it is competitively rolled-out and competes with existing DSL while in most of the cases challenging the incumbent cable networks, (d) does not need ex ante regulation and therefore is rightly not covered by existing European regulation. On the opposite, VDSL technology used in both FTTC and FTTB architectures (a) leads to a substitution of the existing network, (b) is much more ambitious in terms of speed and scale, (c) risks posing competition and contractual problems as it impacts existing DSL business models (d) can be addressed without any change in the current regulatory regime.

b) the consultation limits its scope to the conventional technological description of the different architectures and does not address the relevant questions for a market and competition analysis which are: where, when, in what quantities, by which types of players and in which market environment will these roll-outs occur, and will they affect this market environment in a pro-competitive or in an anti-competitive way? Obviously, there would be no certainties (as it is common concerning the future), but designing realistic reference scenarios for market situations would be a sanity check of the relevance of the proposed regulation.

c) the perimeter of the analysis is inconsistent both formally and in substance: on a formal point of view, if the word "metallic" was skipped from the definition of market 11, then market 11 would become technologically neutral and there would be no consistency to limit it arbitrarily to copper pair and fibre. All other fixed access technologies should also be included in market 11, **including cable networks**. In substance, the answer to the first question has proved that there is no relevant market and regulatory analysis of Very High Speed services which could exclude cable networks. Fixed broadband wireless solutions, even though they may not represent fully-fledged alternatives, can easily find their place in the market and offer broadband services to a part of customers and therefore discipline any attempt of anticompetitive behaviour. CPL could have had a strong potential should it not have been deterred by the past access regulation.

d) last, the consultation ignores a major feature of G-PON networks as opposed to point to point FTTH networks which are their efficient utilisation of ducts. The existing ducts, used by the copper local loop, were designed to host a single point-to-point wireline access network. While some overcapacities exist, mainly for operational reasons, that can be made available to meet extra needs, it is unlikely that they could be sufficient to host two or more point-to point-networks. So, the priority is to use ducts efficiently. However, telecom ducts are not the unique infrastructure suiting the needs of FTTH deployments: sewers, as used by Free in Paris, ducts used by cable operators, constitute appealing alternatives while new technologies such as micro civil works extend the scope of the different solutions. The availability of infrastructures can be assessed on a case by case basis by Authorities in the different regional geographies⁶. Technologies such as point-to-multipoint PON solutions which limit the costs of civil works have to be favoured in any case.

3 Do you agree/disagree with regard to the conclusions on economics and business case studies?

The consultation does not provide enough clarity on the major business cases that will condition the rise or fall of NGA. Business case studies should be organised around the two major realistic scenarios that can be anticipated:

- first, the scenario of simultaneous deployment of FTTH both by new entrants and by the incumbent in addition to the existing Local Loop/ADSL networks and in competition with cable operators;

- second, the scenario of deployment of VDSL at the Cabinet or at the Building by an incumbent operator which is designed to become a substitute to its existing ADSL network, and its impact on existing LLU-based competition.

A. Roll-outs of FTTH by entrants and incumbent in competition with ADSL and cable networks

⁶ ARCEP has planned a field study to increase the collective knowledge on this issue.





The first basic scenario corresponds to the deployment of FTTH and enhanced HFC both by new entrants and the incumbent in addition to the existing copper / ADSL networks.

For the few years to come, the question of FTTH roll-out will be limited to densely populated areas, where ADSL operators compete vigorously and – very often - cable operators are launching their Very High Speed services. The economics of FTTH are unknown today, both in terms of costs and revenues: they will be revealed by the market forces in a context of intense competition. This experience will provide the information necessary to discover the limits of expansion outside of the dense areas, and ultimately define in due time the form of regulation which may be relevant, if any. Obviously, if there is a business case for FTTH to expand geographically, it will be the same situation for HFC cable networks.

The rationale for any FTTH roll-out is the prospect of competition with the Very High Speed services that are introduced by cable operators on their enhanced HFC networks to their full customer base. The second objective is to seize the opportunity of the on-going growth of bandwidth demand and of the increasing convergence of TV (including Pay-TV), VoD and telecommunications services to build a new, future-proof access network with almost unlimited bandwidth.

The business case of FTTH deployment is radically different from the FTTC/B VDSL business case, and depends on three considerations : (a) how to minimize time and cost to deploy fibre cables in buildings and customer premises (b) how to fix commercial tariffs in order to have enough customers on the new infrastructure while keeping a decent ARPU, so that the ARPU multiplied by the number of customers leads to a satisfactory return on investment (c) how to minimise the utilisation of civil work infrastructure by these new networks in order to limit up-front investments and have infrastructure competition:

- (a) how to minimise time and cost to deploy fibre in buildings and customer premises: regulators can help in this very important point which is not deeply addressed in the ERG's consultation⁷. France Telecom/Orange is in favour of a single fibre wiring of each individual building, opened to all FTTH operators. NRAs can also make things easier by doing public communications and by promoting rules that help FTTH operators when negotiating the access to buildings. In most countries FTTH faces this difficult and costly task, while VDSL and cable operators have already their solution ready⁸.
- (b) while incumbents switching to VDSL have a reduced uncertainty concerning demand, this is not the case for FTTH deployments, either for entrants or for incumbents. FTTH operators must conquer their customer base, as FTTH roll-outs are additional and not substitute networks. The first parameter of their business case is the number of customers that they will be able to attract on their infrastructure and the second is the ARPU of each customer. FTTH operators' dilemma will be to fix commercial tariffs low enough to attract a large customer base and high enough to have a decent ARPU, so that product of ARPU by the number of customers could ensure a satisfactory return on investment. To solve this dilemma, they absolutely need flexibility when fixing commercial tariffs: introducing regulated wholesale tariffs will make the system too rigid and will make the resolution of this economical problem impossible.
- (c) the third question is how to minimise up-front civil work investments, which determine the general profitability of FTTH deployment and also address the issue of level playing field competition between FTTH operators. Where there is a readily available alternative to the ducts of the incumbent, as it is the case with sewers in Paris, new entrants are in a favourable position to roll-out their FTTH network, because they have no civil work investments to do. In any case, the use of G-PON technology which saves ducts utilisation is a best way to improve the economic performance of FTTH and to allow infrastructure competition.

⁸ In some specific countries (but not in France), incumbent can roll-out fibre in building without having to renegotiate with buildings co-owners.



⁷ Paul Champsaur, ARCEP's Chairman declared to « Les Echos » 6 June 2007 : « l' ARCEP souhaite que le premier opérateur qui investit dans un immeuble garantisse aux autres l'accès de sa fibre ».



B. Roll-out of VDSL by the incumbent as a substitute to the existing ADSL network and its impact on competitors

The second basic scenario corresponds to the deployment of VDSL at the Cabinet or at the Building by an incumbent operator which will sooner or later replace its ADSL network, firstly to optimise its network costs and secondly to seize the opportunity for enhanced services and extra revenues. The first relevant question is to understand the economic rationale of this move by the incumbent. The second one is to analyse how competitors using LLU can protect their investments and have the opportunity to move from ADSL to VDSL in conditions which allow them to compete with the incumbent.

Roll-out of VDSL by the incumbent is essentially a technical-economical decision to optimise the way it serves its existing customer base. Therefore, the uncertainty of the business case regarding the demand side is reduced, though the business case can be improved by the expectation of a moderate increase in ARPU due to the higher downstream bandwidth of VDSL when compared to ADSL2+ for a proportion of customers. Therefore, the business case should concentrate in the first place on the cost equation for the incumbent.

Cost reductions:

- one level of distribution frame instead of two,

- opportunity in certain cases to sell the buildings hosting MDFs,

- phasing out of high capacity copper pairs between MDF and Cabinets, replaced by fibre, with less ducts and cable costs.

Cost increase:

- DSLAM and transmission equipments at Cabinet at the price of lower economy of scale,

- possible need of shelters to host them.

The revenue equation is interesting but less critical, as the incumbent should in the end switch its ADSL customer base on its new network. An increase of the customer base thanks to the possibility to reach subscribers who were far too distant from the MDF to be provided with ADSL service is socially important, but should not be very significant economically, first because they represent a fairly small proportion of customers, second because broadband revenue will become a substitute for existing narrowband revenues. An ARPU increase on existing broadband customers should be generally moderate as services on VDSL will be for the majority of customers in the continuity of services on ADSL2+, mainly because of DSL down and up flows limitations.

The study of the business case of LLU-based competitors and of the application in that context of existing regulation which is capable of addressing the issue, should concentrate on two considerations:

- the elements of the cost equation of VDSL roll-out by the incumbent must be shared by LLU competitors on the most efficient non discriminatory way: for instance, it would not be acceptable that the phasing out of MDFs, if it happens, benefits the incumbent while damaging its competitors. Moreover, competitors having already subscribed to LLU at the MDF must be able to carry on their ADSL business independently from the incumbent's decision to move to VDSL during the period necessary to make their own technical and marketing plans.

- the terms and conditions proposed for VDSL bitstream Access and for Sub Loop Unbundling and its associated resources should allow service differentiation opportunities for competitors and enable them to effectively compete with the incumbent on VDSL services. Therefore, it is necessary to take into account the gaps due to economies of scale which benefit incumbents moving to VDSL. In particular, the move from the MDF to the street cabinet would be an insurmountable barrier for unbundlers if they could not have access to backhaul between the MDF and the street cabinet or to a specifically designed bitstream access service with a fair share of scale economies between incumbent and unbundlers in this context.

As a summary, adequate regulation of wholesale prices, prevention of possible margin squeeze and NRAs' attention to preserve the fair profitability of alternative operators' LLU investments would be concrete factors preserving a level playing field and the possibility to compete on merits.





4- What is your opinion on the regulatory implications and on the evolution of the ladder of investment? Additionally please provide more specific comments regarding the issue of multicast capabilities and their regulatory treatment.

France Telecom/Orange suggests deriving from this analysis the following regulatory implications:

- Regarding FTTH

The roll-out of FTTH networks by new entrants and by incumbent operators are pro-competitive (a) by itself, as multiple operators engage into competing FTTH projects of the same magnitude, a large majority of existing FTTH accesses in Europe belonging to alternative operators (b) because they occur for the coming years in zones where cable operators have a strong competitive advantage over FTTH for very high speed services (c) because FTTH will have to match the very strong position of existing ADSL services in dense areas. Furthermore, the choice of point-to-multipoint G-PON architectures uses ducts in the most efficient manner and maximises the opportunity for infrastructure-based competition in reducing the costs of civil works. The regulation of FTTH investments is therefore useless in terms of competition, harmful for investment and commercial flexibility. In artificially limiting the extension of fibre coverage, it would limit the prospect of sustainable competition and harm customers.

Market 11

The current definition of Market 11 allows NRAs to deal with any regulatory issue arising from FTTC, FTTB or SLU. All of these architectures are based on the existing copper loop. Access to this copper loop access has been mandated by the Regulation 2887/2000, which is based on the theory of essential facilities. This theory applies in the case of an existing infrastructure held by a company in monopoly or in a dominant position on a market and that cannot be replicated by competitors under reasonable economic conditions.

This reasoning clearly does not apply to fibre, which has been rightly excluded from the scope of the Regulation as it is mentioned in the whereas 5: "The provision of new loops with high capacity optical fibre directly to major users is a specific market that is developing under competitive conditions with new investments."

As a consequence, France Telecom/Orange is strongly opposed to an enlargement of the scope of this market to new technologies.

• Sharing of civil works infrastructure

Multi-point technologies, such as G-PON FTTH or HFC cable networks, efficiently minimise the costs of civil works and paves the way for infrastructure competition. Finding the right infrastructure to roll-out fibre in the local loop will depend on several elements:

- the part of the local loop which is considered (feeder, distribution, in-building),

- the utilisation rate of existing infrastructures (sewers, energy ducts, cable TV ducts, telephone ducts, ...),

- the cost of investing in a new infrastructure, depending of the type of zone and of local regulations,

- and the possibility to share the investment between several Very High Speed services operators.

These questions have to be objectively assessed, as ARCEP, the French NRA plans to do it in the next months. It is unlikely that a general problem will be identified, which could be solved by a single general solution. Most likely, there will be either no problem to find available ducts (in Paris for instance) or local problems which need local solutions. Moreover, rolling-out FTTH will take a long time: if there is a competitive problem, it can be solved ex-post without risks for competition.

So, in those specific cases of alternative operators not being able to roll-out out their fibre under reasonable conditions, solutions could be found that are consistent with European competition law, in particular:





- access to the incumbent's ducts in the local loop has to be strictly indispensable to the activity of third parties,

- the sale to third parties of an access to these ducts is due only within the limits of overcapacities, once the needs of the owner of the resource have been met.

• Ladder of investment

The basic principle of the ladder of investment was to create conditions favourable to new entrants so that they get enough retail market shares to invest progressively in access networks.

Firstly, market conditions have changed as alternative operators now have gained significant market shares and should be able and willing to invest in their own facilities. There is no point any more to impose on the incumbent SMP operator an obligation to accommodate and support all possible competing business models with several levels of wholesale offers in the same area. Finding an economic balance between several options of wholesale offers in a given area is becoming impossible and puts the investing operator at a competitive disadvantage. So France Telecom strongly suggests limiting access obligations – if any – to a maximum of one wholesale offer in a given area.

Secondly, the protective character of the ladder of investment may be illusory for alternative operators that do not secure their investments in time. VDSL roll-outs associated to the removal of parts of the copper networks are a good example of this fragility.

- Regarding VDSL at the Cabinet and at the Building

The roll-out of VDSL at the Cabinet or at the Building by an incumbent operator significantly impacts LLU–based competitors. The existing European regulatory framework provides the NRAs with all the relevant tools to encourage and ensure on-going level playing field competition. A firm application of the existing European regulation may be necessary, but no change of this regulation is needed.

Backhaul

In the case of the deployment by the incumbent of VDSL at the Cabinet or at the Building with the possibility to switch the incumbent customer base from ADSL to VDSL, France Telecom/Orange considers that backhaul between the MDF and the street cabinet could be provided as an associated resource of market 11 under non discriminatory conditions to competitors having already subscribed LLU at the MDF to contribute to a viable business case for SLU⁹. A specific transparent VDSL-based bitstream access, priced according to non discrimination principles, could also be a solution to protect the investments made by unbundlers at the MDF and provide a fair share of economy of scale between the incumbent and competitors using LLU.

5- Do you agree/disagree with the conclusions?

Implications for Market 11

France Telecom/Orange is opposed to an enlargement of the scope of this market (see arguments in answer to question 3). FTTH should remain out of the scope of market 11.

FTTC and FTTB are covered by market 11 regulation. In case of deployment of VDSL at the Cabinet or at the Building, sub-loop unbundling (with associated resources) and Bitstream access offers must be defined and priced so that the viability of LLU operators – and their ability to differentiate - is not negatively affected by the change. Margin squeeze tests should be adapted consistently.

⁹ Study carried out by Analysys for OPTA: « the business case for sub-loop unbundling in the Netherlands » at annex 3 p75/93 of the consultation document.





Ladder of investment

This regulatory tool is no longer adapted in the context of NGA (see answer to question 4). One single regulated wholesale offer in a given area should be the maximum that could be mandated.

Duct sharing

The ducts are outside of the scope of electronic communication services and networks. It would also make little sense do define a market of telecom ducts as operators are considering the possibility to use alternative infrastructures. Furthermore, it would be inappropriate to address the issue of access to ducts through a general ex ante approach (a) while competitive roll-outs to date have not met duct access problems (b) for issues with strong local characters (c) and time-scales consistent with ex post intervention, if intervention happens to be necessary.

To conclude on FTTH, none of the three cumulative criteria pointing at the relevance of a market is fulfilled:

- There are no entry barriers as new entrants more than incumbent operators are currently rolling-out FTTH accesses in a competitive mode ;
- FTTH operators are facing fierce competition as they compete for value with established DSL and cable existing and future offers ;
- The capacity of Competition Law to protect competition in a market that is born competitive and which time-scale is fully consistent with ex-post intervention if necessary.





Annex: detailed remarks

France Telecom/Orange wishes to make specific remarks on the consultation and its annexes:

Chapter 2

Remark on p 11/93 The 64 splitting level is only available with GPON. Other standards (EPON, BPON) allow a maximum splitting level of 32.

Chapter 3

Page 14: A national average for the number of street cabinet per MDF is not relevant as it is highly variable between urban and rural zones.

Page 15: Local loop characteristics from the table provided by Alcatel (figure 8) are only indicative. In some countries, in France in particular, detailed information on French local loop coverage is provided to ARCEP. Unfortunately, such information on copper local loop is not available with the same precision and the same reliability everywhere, which makes it difficult for alternate operators to define business cases in the concerned MS.

Chapter 4

page 36

For the in-building part of FTTH, the position of the incumbent in relation with co-ownership property representatives depends on the country. For instance in France, France Télécom has no specific contractual relations with co-owners of buildings and therefore has no advantage over other FTTH operators. It is not the case of French cable operators who have contracts with building co-owners. In some other countries, on the contrary, incumbents have specific rights concerning in-building wiring which they can use for in-building fibre without any negotiation. In that specific case, ex ante regulation must impose open access to in-building fibres.

Page 38

Market 12 corresponds to bitstream services build on market 11 copper pairs infrastructure. Otherwise "cable bitstream" should have been included in the market analysis within the current framework. Therefore, services build on FTTH infrastructure are not part of market 12, contrary to what is written in the ERG consultation.

Annex 2

Page 58

France Telecom/Orange considers the document underestimates the differences between services on DSL technology and services on fibre technology. FTTH permits symmetrical bandwidth and reliability, much more applications like High definition TV, multi-access, photos, videos, home working, sharing of user generated content. The effect of these differences will not be seen by customers immediately, as it depends on the availability of specific services and thus on Very High Speed Services customer base. But they are of major importance in the long run.

Page 59

There is an obvious inconsistency in the analysis when it comes to the inclusion of FTTH in market 11. The same arguments that have been used to justify the exclusion of cable fully apply to fibre:

- Sharing of channels between several subscribers ;

- Unbundling limited at a level equivalent to the cabinet, which would be costly and would only allow to serve a limited number of subscribers;

- Absence of national and continuous coverage.





On this basis, ARCEP considered that there were no substitutability between France Telecom/Orange's copper local loop unbundling and cable unbundling. ARCEP added that there were no unbundling offers on cable.

Although some of these arguments can be discussed (cable cover 40% of French homes, much more than 25%, and is rolled-out in all major cities in), it would be strange signal of objective regulation and selective neutrality if identical arguments could lead to opposite conclusions.

The document could have developed a more complete picture of Wifi. The recent acquisition of Ozone by Neuf Cegetel (one of the three main operators in France) indicates the potential of this technology for an operator which is rolling out DSL and fibre.

Page 60

The presentation of G-PON is incomplete; the document omits the advantages of this technology. It is inconsistent to favour point-to-point while underlining the cost of civil engineering works because this architecture precisely needs more space in ducts and raises costs.

France Telecom/Orange would like to mention that the major fibre developments in the world (USA, Japan and Korea) are not surprisingly based on the PON technology.

France Telecom/Orange does not agree with the description of the role of local authorities.

It is wrong to say that their intervention is limited to "projects in areas with lack of private initiative and competition". A lot of projects from local authorities actually concerns areas where several operators are already in competition.

It is not the role of local authorities to "*promote the choice of a common optical loop topography by operators*". This implies constraining operators in their investment and to impose a kind of "public network planning" in contradiction with a competitive environment.

This document asks for an important role of local authorities with the hypothesis of market failure and lack of private investments without analysis or demonstration. Moreover it is not their role to *"ensure the fair opening of the new optical loop"* as this authority is only given under the framework to NRA and only after a market analysis.

France Telecom/Orange considers local authorities can facilitate the roll-out of fibre networks at two levels: in simplifying the procedures related to the realization of civil works and facilitating the in-house wiring.

Page 61

The part of the scheme concerning G-PON should be amended.

