

Public Consultation by the
Regulatory Authority for Electronic
Communications and Postal Services (ARCEP)
concerning

“Discussion points and initial policy directions on
internet and network neutrality”

Response from the France Telecom Orange
Group

20th May to 13th July 2010

Public Version

Link to the ARCEP site;

http://www.arcep.fr/uploads/tx_gspublication/consult-net-neutralite-200510.pdf

Executive Summary

The principal challenge arising from the debate concerning “internet and network neutrality” firstly consists of ensuring the sustainable development of the internet to enable a growing number of users to access increasingly numerous and innovative services via ever more varied and sophisticated terminals, while being able to rely on increasingly efficient networks and by using the means of their choice. The situation at the moment is particularly sensitive because of the transformations announced concerning mobiles, very high-speed broadband and new types of terminals.

France Telecom Orange is of the opinion that the public authorities and particularly the Authority:

- **Favour regulatory methods** and positions that will encourage players to **contribute to the sustainable development of the internet through investment and innovation.**
 - Orange therefore supports the Authority’s approach, whose objective is to put it in a position whereby it will be able to assess the market for IP interconnection (5th recommendation), the natural consequence of which will be to put an end to the abusive practices of certain players and the setting up of suitable economic mechanisms (such as, for example “call termination data”), allowing for a more equitable spread of the cost of investment in network capacity between the players and encouraging the deployment of solutions for optimising the flow of traffic (CDN, more efficient or less energy consuming systems for encoding etc...),
 - Orange also supports the 4th recommendation, which recognises that it is legitimate for operators to offer “managed services” while respecting the laws governing competition.
- **Limit to the strict minimum the “principles” - whose application and verification could prove to be difficult or even counter-productive** – that could result in the internet remaining what it is or has been, or in limiting the choices offered to consumers. In this respect France Telecom Orange believes that:
 - the 1st recommendation (definition of internet access) should be made more flexible to take into account technical constraints and the need for players (operators, ISV’s, terminal manufacturers) to be able to segment their offers, providing that the consumer is correctly informed,
 - the 2nd recommendation (traffic management practices) should recognise that it is legitimate for operators to manage their network and the extreme difficulty of explaining these practices to the consumer sufficiently clearly so that he can make choices (such as choosing his ISP, consulting certain services rather than others or choosing certain terminals rather than others),
 - the 3rd recommendation (minimum quality of service) requires challenging sector-based action , but to which Orange will attempt to contribute as much as it possibly can.

- **Trust the self-regulatory approach** and multi-lateral approaches with the associations concerned to provide solutions to “consumer issues” (6th recommendation – the use of the terms “internet” and “unlimited”, particularly for mobiles).
 - France Telecom Orange otherwise undertakes, over time, to cease use of the terminology “unlimited” for ‘fair usage’ type offers, providing that the sector as a whole adopts the same position.
- **Will ensure that the principle of “neutrality” is also applied in a consistent fashion to the ISV’s** (information society service vendor – particularly including the key internet players) **and to the manufacturers of terminals;**

The debate about the “neutrality of the internet and networks” is also about image and for this reason it is important that, over and above the list of practices that the ISP’s could theoretically indulge in, the **public authorities remember that the operators (ISP’s) play and will continue to play a predominant role in the development of the internet, particularly through significant investments** in building networks to enable the whole ecosystem, including the ISV’s and the manufacturers of terminals, to provide large numbers of innovations to their customers.

Layout of the document

Executive Summary	2
Layout of the document.....	4
I The Context and the Challenges	6
I.1 The definitions proposed by ARCEP seem to us to provide a useful and enlightening framework for the debate, but need to be completed	6
I.1.1 The notions of telecommunications carrier and terminal manufacturer should be introduced.....	6
I.1.2 The definition of the scope of the internet should be amended to take into account the user's right to be "invisible" on the internet.....	7
I.2 The principal challenges: creating balanced regulation (between ISP's, ISV's and manufacturers of terminals), thereby encouraging the players to invest and innovate to ensure the sustainable development of the internet.....	8
I.2.1 Historically, the development of the internet has greatly benefitted from the ability of traditional copper-based networks to provide capacity at very low incremental cost	8
I.2.2 ... but today the internet is going mobile, very high-speed broadband and better integrated in terminals – the major challenge to be addressed by public authorities and the players in the market place is thus to ensure the sustainable development of the internet.....	9
I.2.3 The principles for regulation should be balanced (between ISP's, ISV's and the manufacturers of terminals)	10
I.2.4 Apart from the suspicions of potentially illegal practices, operators are expected above all to make considerable investments in networks to enable the whole ecosystem to provide new services to the consumers	11
I.3 The European regulatory framework provides the Authority with the necessary and sufficient tools to resolve the issues concerning the "neutrality of networks and the internet".....	11
I.4 On the contrary, the situation in the USA does not seem to us to provide a relevant framework concerning regulatory obligations for the neutrality of the internet in Europe.	12
II Neutrality of internet access networks	13
II.1 1 st recommendation: openness and neutrality of access	13
II.2 2 nd recommendation: control of traffic management mechanisms	15
II.2.1 The fundamental role of traffic management is to improve the consumer experience and it is indispensable for networks to function correctly	15
II.2.2 Such exception should not be adopted as a principle: rather than a ban on the use of traffic management mechanisms affecting only ISP's, it is important to send a clear financial and behavioural message leading to more efficient use of the network ¹⁶	
II.2.3 Even if we subscribe to the overall objective of transparency, it is nevertheless particularly complex to implement towards consumers concerning traffic management	17
II.3 3 rd recommendation: the level of quality of service for "internet access"...	18
II.4 4 th recommendation: managed services.....	19
II.4.1 The possibility of being able to offer "managed services" would allow for the provision of quality services that could not technically be provided over the internet	19
II.4.2 The development of managed services has and will continue to greatly benefit the internet.....	20

II.5	5th recommendation: monitoring the market for data interconnection	22
II.5.1	IP traffic flowing at the interconnection with the Orange network is imbalanced: Orange suffers from unilateral increases in traffic	22
II.5.2	The extremely powerful position of certain internet players has rendered the attempts undertaken by European operators to avoid congestion and to control the situation fruitless.....	23
II.5.3	The progressive implementation of “data termination” would help to resolve the problems encountered with congestion.....	23
II.5.4	“Data termination” would stimulate the implementation of innovative network management solutions	24
II.6	6th recommendation: increased transparency for the end users	25
II.6.1	Operators already have obligations of transparency toward their retail clients	25
II.6.2	The potential adoption of increased measures of transparency for internet users should go hand in hand with an obligation of transparency imposed on other internet players.....	26
II.6.3	Use of the word ‘internet’ should be associated with a generic principle of openness, but its exact meaning should be subject to discussion and not a fixed principle based on technical criteria	26
II.6.4	It therefore seems to us that the focus should be on the term “unlimited”, which is now the subject of discussions with the consumers associations.....	28
III	Other aspects of neutrality.....	32
III.1	Exclusivities	33
III.2	The neutrality of terminals.....	35
III.2.1	The obligations regarding the publication of technical interface specifications and the pre-configuration of terminals affect operators, but no equivalent provisions exist for the manufacturers of terminals.	35
III.2.2	Operators are subjected to specific obligations in terms of the gathering and processing of certain personal data, particularly traffic data, whereas other players in possession of similar information are subject only to common law, which should at least be applied in an effective manner.....	36
III.3	Connected televisions	37
III.3.1	A multitude of terminals and innovative technical solutions will help to enrich the interactive audiovisual experience	37
III.3.2	Connected TV’s could be subject to exclusivities, limited in duration and in scope in conformity with competition law	38
III.3.3	Players offering audiovisual services should be subject to the same legal framework (including for the funding of creation), whatever the means of access, the technique or the country from which the services are offered	38
III.4	Neutrality and privacy	40

I The Context and the Challenges

Question

No. 1) The Authority invites players to comment on its proposed definitions.

I.1 The definitions proposed by ARCEP seem to us to provide a useful and enlightening framework for the debate, but need to be completed

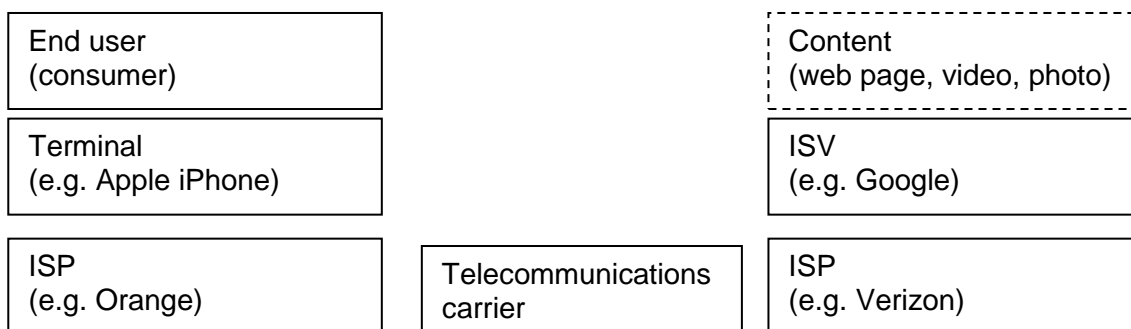
I.1.1 The notions of telecommunications carrier and terminal manufacturer should be introduced

To clarify the debate, it seems to us that it would be useful to present the players, as defined by the ARCEP consultation document, in the form of a diagram highlighting;

- Operators (ISP's and telecommunications carrier) :
 - We agree with the definition of ISP as proposed,
 - The telecommunications carriers could be defined as operators directing the traffic between ISP's (who are generally local operators).
- Information society service vendor and manufacturers of terminals:
 - We agree with the definition of ISV's, even if does not correspond to a definition existing under domestic law and neither, therefore, to any related legal regime. However, there are numerous other definitions in the 1986 law: depending on the content and services provided by an ISV, it fits with the definitions given by this law. It would perhaps be useful for the Authority to refer to it,
 - The terminal manufacturers sell equipments that allow increasingly voluminous content to be used in an increasingly ergonomic fashion. They also occasionally provide the customer and applications developers with kiosks to facilitate the downloading of content (sometimes in exchange for payment, depending on the case).
- End users accessing content, services and applications:
 - We agree with the definition of end user,
 - "Content" is a generic term for describing the content, services or applications that the end user accesses or uses.

The diagram helps to clearly show:

- The interfaces between ISP's and telecommunications carriers, the correct functioning of which seems to us to be at the heart of the issue;
- The fact that ISP's are not the only players in a position to contribute to the implementation of a principle of neutrality for the internet: it should also be possible to apply the principle to terminal manufacturers and ISV's.



It should be noted that the same legal or physical entity might play several distinct roles in the above diagram. An end user might also be a supplier of content, there are a number of operators, which are both ISP and telecommunications carrier and most ISP's are also ISV's (for example, through their portal being accessible to any internet user and providing easy access to different services on the web).

I.1.2 The definition of the scope of the internet should be amended to take into account the user's right to be "invisible" on the internet

It is necessary to define the notion of internet access in order to define the scope of application of internet neutrality and openness.

In this case, the definition proposed characterises internet access as a service providing the "*ability to transmit or receive data from all...public internet addresses*", that borrows from a suggestion made by AT&T in its response in early 2010 to the draft NPRM¹ from the FCC, we are in broad general agreement.

However, it would be desirable to further refine the definition to take into account the rights of the owners of public IP addresses to remain inaccessible via the public internet. This clarification will be all the more important that the spread of IPv6, which will make infinitely greater ²numbers of addresses available, will enable any machine or everyday object to have a public IP address. This characteristic is important for simplifying routing mechanisms, but it is easy to understand that certain servers (sensitive sites, company servers...even end users) do not wish to be "visible" from the internet.

This issue is not new to telecommunications: operators sometimes use technical numbers that in fact belong to the public numbering plan, but are not accessible to other operators, to route certain types of traffic (voice mail, company services) within their network.

It would therefore be appropriate to modify the definition to clarify that the **public internet corresponds to IP addresses that have been made public by their owners.**

In other words, the owners of public IP addresses have the right, but not the obligation, to integrate their addresses into the public internet and thus make them accessible to all internet users according to the principles of internet neutrality.

¹ Notice of Proposed Rule Making

² The number of IPv4 addresses is 4 billion, the number of IPv6 addresses is more than 300 billion billion billion

Question

No. 2) The Authority invites players to comment on its presentation of the background and issues surrounding Internet and network neutrality.

I.2 The principal challenges: creating balanced regulation (between ISP's, ISV's and manufacturers of terminals), thereby encouraging the players to invest and innovate to ensure the sustainable development of the internet

I.2.1 Historically, the development of the internet has greatly benefitted from the ability of traditional copper-based networks to provide capacity at very low incremental cost

To complete the background picture painted by the consultation document, it seems important to us not to forget a number of fundamental facts regarding the conditions in which the "internet", as we now know it (i.e. mainly fixed line and, in France, integrated into multi-service offers), has developed:

- ADSL technology made the internet affordable at a very low incremental cost by using the copper-based access network originally built for only fixed line telephony,
- The advent of fierce competition between access operators, particularly due to technical and financial regulation set up by ARCEP, served to accelerate its deployment.

This enabled millions of internet users to be very rapidly and efficiently connected - at a very low incremental cost – to the services platforms of the ISV's. The best amongst them were therefore able to establish predominant positions and develop increasingly sophisticated services, thus ensuring major revenues along with sustained growth. It should be remembered that, without broadband access and without the networks for collecting and transmitting data which provide the link between them, the majority of the most popular services currently available would not have been developed. The opposite is manifestly not true.

These aspects of the economic background played an even more important role than the fundamental characteristics of the internet's technical protocols.

In the debate about the neutrality of the internet, it seems important to us to avoid – and the consultation document does indeed avoid this pitfall – any myths about the benefits of certain technical protocols or historical business models as well as any allegations about the dangers of discriminatory behaviour by the operators.

I.2.2 ... but today the internet is going mobile, very high-speed broadband and better integrated in terminals – the major challenge to be addressed by public authorities and the players in the market place is thus to ensure the sustainable development of the internet

Today's challenges are different in nature as, with the current state of technology, it is possible to develop:

- New services – more and more demanding on the bandwidth (streaming, video on demand, 3D, services to companies),
- Accessibility via new networks requiring considerable investment in capacity (mobiles, fibre optics, improving speeds in the copper-based network),
- New terminals offering a more integrated customer experience (smart phones, connected TV³),
- Solutions such as Web caches or CDN's whose importance is growing with the development of video and the concentration of audiences.

The formidable potential of these technologies is clear to all, but, without taking into account the new economic realities and with no changes to or clarification of the operating rules between the players, it is to be feared that it will be difficult to efficiently and rapidly deploy these technologies.

The “questions” or “problems” presented by the Authority are to a large extent a consequence of these fundamentals:

- ISV's need ever increasing bandwidth to meet the demands of the end user and, faced with the (historical) perception that the bandwidth available to ISP's is as good as free, they transmit considerable, but not necessarily optimised, data flows to internet users,
- ISP's need to deal with an explosion of traffic that causes considerable additional costs in terms of capacity that is immediately absorbed by a few applications and used by a limited number of internet users,
- The effectiveness of deploying solutions such as Web caches and CDN's is adversely affected by the network's use being free of charge, with the means of reducing network congestion that they represent not currently being recognised at their fair value.

It seems to us, therefore, that the Authority might complete its assessment with a description of the economic and historical framework within which the debate about the neutrality of the internet is set and doubtless draw the conclusion that the major challenge for society and industry is to put in place a balanced regulation (between ISP's, ISV's and terminal manufacturers), which would enable the **sustainable development of the internet for the benefit of all**.

³ The issue of connected televisions is covered by ARCEP from the point of view of the « neutrality of terminals ». This approach only allows the challenges linked to the proprietary nature of applications or the danger of excessive vertical integration to be dealt with. It does not take into account the possible impacts of the short term saturation of fixed line networks caused by the imminent launch of these new commercial offers. This aspect does not appear clearly in the challenges assessed by ARCEP.

The risk of mobile network congestion due to the recent and rapid growth of data traffic on broadband is widely recognised. Concerning fixed line broadband, lesser problems with congestion can already be seen. **The imminence, wide scale commercial launch of connected TV can only make matters worse. It is probable that this will result in a massive increase in the average consumption by customers, well beyond the capacity currently available in the collection and transmitting networks.** New services that make excessive use of the bandwidth such as high definition TV will emerge and will increase the traffic for video.

I.2.3 The principles for regulation should be balanced (between ISP's, ISV's and the manufacturers of terminals)

It is important that the principles of “neutrality” should be applicable to all players (ISP's, ISV's and the manufacturers of terminals) if they are offering equivalent services.

The very widespread broadband access to internet that now exists makes it possible to offer, via external platforms linked to the network, services that it was previously only possible for electronic communications operators to provide. Given this, certain services from ISV's and terminal manufacturers can replace those of the network operators. For example this is the case for VoIP or e-mail. Currently, however, such services do not meet the criteria necessary to come under the regulation governing electronic communications, the protection it provides for consumers and the obligations that it imposes vis-à-vis public authorities. In as much as certain services from ISV's are substitute to those provided by Electronic Communications Services, they should be subject to the same requirements, whatever the underlying technology and whatever the nature of the provider.

Consistency in the scope of regulation is a necessity as much for the protection of the rights of citizens and consumers as for the promotion of fair, merit-based competition between the players in the market place.

Generally speaking, it is desirable to take a broad view of the issue of neutrality. It is up to the public authorities to go beyond the question of the neutrality of access to the internet; the services provided on the public internet by players who are not subject to the regulation for electronic communications should also be neutral.

Subjecting all the players who supply equivalent services to the same regulation would put an end to the unjustifiable advantages enjoyed by some and would allow for greater transparency for their activities.

I.2.4 Apart from the suspicions of potentially illegal practices, operators are expected above all to make considerable investments in networks to enable the whole ecosystem to provide new services to the consumers

The debate about neutrality is also about image – and the positions adopted by public authorities on this sort of issue can have a significant impact.

In this respect, the Authority could well send out a reminder that all the players (ISP's, ISV's and the manufacturers of terminals) have a role to play and ensure that the principles of "neutrality" are applied to all the players.

It might be particularly useful to remember that the **operators (ISP's) represent a key link in the chain of innovation**, and that they are expected to:

- **Make considerable investments** that will only show a return over the very long term;
- Demonstrate **operational excellence** in terms of quality of service.

Such a move would send out **a more positive and rewarding signal conveying a more accurate image of reality in view of the distortions and even caricatures**, which are regularly produced by certain players who attempt both to establish a position as sole defender of the consumer's interests and to give the impression that ISP's are forever trying to implement discriminatory practices.

To illustrate the major role of operators and to mention but two innovations to which Orange has made major contributions, let us remember that:

- Without 3G networks – the normalisation of which began 15 years ago and for which the first investments were made nearly 10 years ago – there would be no mobile internet nor smart phones;
- Without 'boxes' there would not be millions of broadband access points offering VoD services with inbuilt Wi-Fi usable today on portable PC's or notebooks.

I.3 The European regulatory framework provides the Authority with the necessary and sufficient tools to resolve the issues concerning the "neutrality of networks and the internet"

In the introduction, the consultation document does a particularly good job of posing the problem that the Authority is attempting to resolve when it states that *"the Authority [is minded] to address the principle of neutrality of the internet and networks in a pragmatic and reasonable manner. It is essential to avoid two extreme scenarios:*

- *The total absence of traffic management with the distinct danger of the networks deteriorating...along with the quality of service for the end user*
- *Total freedom in the management of traffic...potentially leading to discriminatory and anti-competitive practices with the risk of adversely affecting the model of openness, universality and free expression that is the internet"*

We would nevertheless like to emphasise that the desire to strike a balance between the financial issue of funding the networks, on the one hand and, on the other hand, access for the greatest possible numbers to the wonderful opportunities provided by the new networks, has always been present in the electronic communications sector.

Trying to find this balance has lead legislators (the European parliament, the French parliament) to give regulatory authorities (including ARCEP) effective tools allowing them, in the past, to encourage the development of fixed and mobile networks and allowing them now to assess and provide solutions for the sustainable development of an open internet.

It seems to us that the recommendations proposed by ARCEP concerning the neutrality of networks and the internet, can and should, as far as possible, be enshrined in the current regulatory framework or in that which will result from the national transposition of the principles established by the European regulatory framework revised in December 2009. Indeed, it is widely acknowledged that the European provisions create a satisfactory framework and that there is no need to import terms from the debate in the USA, which are the result of a radically different regulatory and competitive context from that which obtains in Europe.

I.4 On the contrary, the situation in the USA does not seem to us to provide a relevant framework concerning regulatory obligations for the neutrality of the internet in Europe.

The situation in the USA is different from that in Europe; broadband services for access to the internet are fully deregulated both from the competition standpoint and from that of obligations to the consumers.

Furthermore, in the USA there is a high degree of uncertainty concerning which body has jurisdiction over broadband services. Indeed, the jurisdiction of the FCC has been challenged by a decision handed down by the Federal Court of Appeal in the Comcast-Torrent case. The FCC has just started consultations⁴ in order to gather opinions concerning different regulatory options. One, the one presented as being the 'third option', seems to consist of reintegrating broadband services into the scope of regulation for common carriers, but still without imposing the full range of obligations required by that regime and, remarkably, without resorting to the obligations for unbundled type access. Such an option seems somewhat random to certain experts from a legal point of view. Furthermore, and even supposing that the option prevails, it would have consequences for the demarcation between bodies as it would deny authority to the Federal Trade Commission (FTC) and the Department of Justice (DOJ)⁵.

⁴ Consultation document launched by the FCC on 17th June 2010
http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-297944A1.pdf

⁵ In line with the principle of the exclusivity of competency arising from the Trinko directive

II *Neutrality of internet access networks*

Questions

No. 3) The Authority invites the players to comment on its general approach to the terms and conditions governing Internet access.

No. 4) The Authority invites the players to comment on the six proposed directions.

II.1 1st recommendation: openness and neutrality of access

ARCEP believes it necessary to define a “*space for access to the internet, clearly identifiable by users and where neutrality is the rule*” and proposes the following definition;

1st direction

The Authority recommends that, to provide “Internet access,” an ISP must be obligated, in accordance with the legal provisions in effect, to furnish end users with the ability to:

- send and receive the content of their choice;
- use the services and run the applications of their choice;
- connect the hardware and use the programmes of their choice, provided they do not harm the network

Generally, France Telecom Orange favours a generic principle of openness to all services made accessible over the internet, but it seems to us that this definition of access to the internet is, in many ways, either too generic or too rigid.

In some cases (for example internet access by satellite), there can be technical reasons for which certain services (for example games that require a very short response time) cannot be provided. In as far as this type of constraint is clearly explained to the customer, it should nevertheless be possible to consider such a service as an “internet access”.

For terrestrial mobile networks (GSM, 3G, LTE), there is also a latency period greater than that for fixed line internet or network management mechanisms (handover to go from one cell to another when mobile), which can, for some services, also result in a different customer experience than with fixed line internet.

It would be particularly excessive to apply the term “internet access” only to that provided by a fixed line.

More generally, it would seem inappropriate to limit the term “internet access” simply to offers that enable access as specified by technical standards.

To be able to enter a market it is very important for the players (operators, ISV's, terminal manufacturers) to be able to segment their offers and propose:

- Basic offers, ‘packaged’, or not, with certain protective or restrictive measures, at an attractive price;

- And options (or other offers) enabling better informed users to deactivate certain protective or restrictive measures and offered, as the case may be, at a higher price.

If the Authority were to adopt the first recommendation as written in the consultation document, it would realise that almost all French internet users do not have “internet access”.

Orange, for example, automatically provides an anti-spam filter in its ‘Net’ offer for the e-mail service along with a device for blocking pings and a temporary (but not fixed) IP address.

All of these restrictions in fact correspond to consumer needs (security, protection...) or to technical and financial constraints (IPv4 addresses are rare) and are provided as options – either paid for or free of charge – enabling more expert users to access more services if they so wish.

In the same way, Orange offers the possibility of activating a VoIP option to its mobile customers, the financial arrangements for which vary according to the main mobile package that they subscribe to.

Finally, we would remind you that, as an ISP, it is not possible for us to provide access to an inaccessible site, because that would be the choice of the owner of the corresponding IP address.

It is Orange’s opinion that the term “internet access” should apply to any offer that allows the customer to, **if necessary by activating an option**, access services made public over the internet.

It would be possible to hold multi-lateral discussions about a list of minimal options with the consumer associations, service providers and public authorities (DGCCRF, ARCEP, ...)

The compatibility of the absence of options for certain specific services with the principle of neutrality is a matter for competition laws.

To be strictly “neutral” such a principle should be applicable to both ISV’s and terminal manufacturers.

*Body for competition, consumer protection and the repression of fraudulent practices.

II.2 2nd recommendation: control of traffic management mechanisms

The Authority proposes controlling traffic management mechanisms under “internet access”.

2nd direction

The Authority recommends that the traffic management practices that ISPs employ to ensure Internet access remain exceptional and comply with the general principles of relevance, proportionality, efficiency, transparency and non discrimination.

II.2.1 The fundamental role of traffic management is to improve the consumer experience and it is indispensable for networks to function correctly

By way of an introduction, it is important to remember that the fundamental role of traffic management is to improve the consumer experience. Traffic management enables the end user to have better access to content and information by preventing the risks caused to the correct functioning of the network by congestion and it also helps to improve – not adversely affect as claimed by the consultation document from ARCEP – the smooth routing of traffic.

That operators may legitimately resort to traffic processing techniques is widely acknowledged in both the American and European debates. The revised European framework recognises the need and Commissioner Nellie Kroes has underlined the importance and the need for traffic management in ensuring network quality⁶.

The purpose of the different forms of traffic management (*traffic shaping*⁷, *throttling*⁸, ...) is to provide the best possible answer to varying consumer expectations in terms of quality of service, by distinguishing between the types of service (e.g. voice calls, e-mail, video,...) carried by the network.

There may also be a need for traffic management mechanisms even when there is no saturation, for example:

- to minimise the transfer time for services with limits on crossing time (which represents a significant gain for these services) by increasing that delay for services for which it is not important (thus without any significant loss of quality for the latter). Let us note, however, that such mechanisms are not standardised and therefore may suffer when crossing interconnection interfaces between two networks,
- temporary storage mechanisms (Web caches) for portions of very popular content, videos, pictures and music can be directly distributed using special functions in the access network rather than being transported thousands of times

⁶ Speech by Nellie Kroes made at ARCEP on 13 April 2010

⁷ Traffic shaping is a practice that consists of analysing the different types of usage to ensure that those which are sensitive to delays, such as voice, have priority over other less sensitive types of usage, such as e-mail. A delay of a few seconds does not affect the consumer experience for the latter. Traffic management is the technical optimisation of the efficiency of the network with the available resources.

⁸ Throttling is the practice consisting of slowing down data streams in order to limit network congestion and avoid breakdowns of routers and servers. Such measures usually allow the flow of traffic to be serviced while bringing the resources of the affected network back to normal, meaning an uncongested state.

across the whole internet. This mechanism, based on CDN technology, helps to greatly reduce the saturation of core networks upstream from access networks.

To ensure the optimal flow of all types of usage, without necessarily affecting the quality perceived by the customer – operators have to implement traffic management measures; they go together with investments in capacity building. They can in no way be considered as exceptional.

The two approaches (traffic management and investment) are not in contradiction with each other, but can and should be combined.

It is fundamental to recognise the legitimate right of operators to regularly manage traffic and not just on an exceptional basis.

In this respect, it does not seem reasonable to state (final paragraph, page 20) that *“restrictive practices should only be possible if they are in response to technical justifications; they must never consist of an interdiction or the blocking of an application or protocol”*.

To our way of thinking, restrictive practices, if they are clearly explained to the consumer, do not pose any particular problem (all the more so if there are optional mechanisms allowing the informed consumer to deactivate the restrictions). It would not be desirable if, by disallowing all means of segmenting offers, the result were to be either a massive price increase or such a growth in usage that available capacity would be swamped and, in the end, all parties would be penalised.

II.2.2 Such exception should not be adopted as a principle: rather than a ban on the use of traffic management mechanisms affecting only ISP's, it is important to send a clear financial and behavioural message leading to more efficient use of the network

Whereas we share the overall objective stated in the 2nd recommendation of resorting only by exception to traffic management practices to resolve chronic problems with congestion, we believe that it is not enough to impose such a principle for the actual problems encountered to be lastingly resolved.

To borrow a metaphor from the world of real traffic, it is not enough to ban traffic jams on motorway networks or local roads to prevent traffic jams from occurring.

It is precisely the case that the most effective public policies for reducing problems of congestion on the road network consist of constantly sending out behavioural and financial messages to the infrastructure users: taxes on fuel, traffic information (especially at peak times), the development of relatively cheap public transport, reducing the speed limit at times of congestion to maximise the average speed, more restrictive rules for professional road users (bans on lorries at weekends), the setting up of tolls, contributions to the climate, energy...

In the same way, there is no reason to wait for congestion to occur before implementing crawler lanes for slower vehicles as only an exceptional measure.

Depending on the types of congestion encountered on the internet, the same type of policy should be adopted by the network operators to ensure the sustainable development of the internet.

It is preferable to send out the right financial and technical messages to players who are able to exploit them effectively:

- In very concrete terms, it could be the application of “termination data” to all incoming traffic to a network, aimed at paying back the investments in capacity necessary to keep the traffic flowing in the network,
- On the other hand, ineffective or ill-defined technical and financial rules can encourage operators to keep potential saturation outside their network through the sizing of the incoming capacity of their network.

Sending out such messages could also encourage all the players to look for optimal technical solutions enabling the better use of resources for the benefit of all.

II.2.3 Even if we subscribe to the overall objective of transparency, it is nevertheless particularly complex to implement towards consumers concerning traffic management

Firstly, it is important to point out that an operator can only commit (and be transparent) about what he controls. Hence, for fixed lines an operator only controls access, meaning what happens between the ‘box’ and the last active piece of hardware in his network (DSLAM card). Even then, the propagation of the signal in a copper twisted pair cable can sometimes be disrupted, for example by a neon light near a ‘box’ or by the inopportune use – potentially by a different operator – of a twisted adjoining pair with the one used by the internet user.

In practice, the majority of the components of a network used by operators are shared by customers and this is notably the case for the mobile access network: the radio resource is shared by a large number of users in the same cell and it is easy to understand, on the one hand, that it is not possible for an operator to foresee a spontaneous increase in user numbers and, on the other hand, that it would be particularly complicated to explain to a consumer the network management mechanisms used in this type of situation to relieve the saturated radio resource and to attempt to restore the traffic through more distant antennae or by using less high performance technology, which may be sufficient to ensure customer service.

For the collection and the core networks, the traffic management techniques are different again (some have been described in section II.2.1) and it is equally easy to understand that it would be particularly complex to explain them in sufficiently simple terms to a consumer, while giving him information that is relevant to him (knowing that not all consumers are interested in the same internet services).

Finally, it is possible that congestion may result from the traffic management policies implemented by the ISV’s (or the operators that they use) and, in this case, the ISP is even less well placed to provide the customer with relevant information.

It is therefore extremely difficult for an ISP to describe its traffic management practices while providing the consumer with relevant information (and informing customers “more” does not necessarily mean informing them “better”).

Such a description would oblige them to go into a level of complexity such that it is highly probable that it would be of no use to the customer in choosing his ISP or what he needs to do to make efficient use of the network...while giving him very incomplete or even wrong information in relation to his real concerns.

II.3 3rd recommendation: the level of quality of service for “internet access”.

3rd direction

A connection to the Internet must be provided with a sufficient and transparent quality of service.

To guarantee this, the Authority is launching sector-specific efforts to qualify the minimum quality of service parameters for Internet access, and is working to implement specific indicators.

We would firstly like to give a reminder that Internet Access Providers for Fixed⁹ or Mobile¹⁰ already give numerous Quality of Service indicators.

If other indicators were to be established for the purposes of improving transparency, then it would be necessary to ensure that they:

- Make sense for the customer who perceives quality as being end to end and may well be also interested in criteria other than purely technical considerations (e.g. energy consumption or the % of recyclable materials in the box or the terminals),
- Can be controlled by the operator: it would, for example, be unjust to make ISP's responsible for fixing – *a fortiori at its expenses* - access problems for a saturated or faulty external site,
- Are sufficiently normalised to not be subject to unverified declarations that could harm healthy competition.

⁹ For the Orange triple play offers, “CGA Net and Net plus” (appendix 1 – article 17) stipulate our commitments to quality of service, which are:

- access level of 97 %;
- 98 % for the services that we operate (personal pages and the user space) and 99 % for electronic mail).
- A minimum reception speed of 512 Kbits for the internet component

These commitments to QoS the access segment and not the end to end QoS for the traffic carried.

In conformity with the Directive of 16 March 2006, France Telecom and Orange France communicate to their customers through their General Conditions for Subscribers (CGA) and Service Contract (CS) information regarding the quality of service offered under the terms of the subscription (see appendices 3 and 4).

¹⁰ For Orange mobile offers, article 9.1 of the CGA's indicates that the Operator

“takes all necessary measures to maintain the continuity and the quality of service”.

This commitment is further clarified in article 5 of the CS's covering the processing of calls in case of moving through an area not covered by the 3G network (communications passing through the 3G network and impossible to access the services available exclusively on the 3G network). This article also stipulates the conditions and circumstances under which speeds vary on the 3G/3G+ network.

Apart from these descriptions, Orange France also informs the customer that “in these conditions, Orange is not in a position to commit to a guaranteed bandwidth, particularly for access to mobile internet services”.

The figures included in the CS's concern the flow of voice traffic.

For all Orange Mobile offers the contractual conditions are available at the following address:

http://www.orange.fr/bin/frame.cgi?u=http%3A//mobile.orange.fr/content/ge/high/v2_reperes_mobile/reperes_mobile.html

Finally, even having established such indicators, it would still be necessary to define an acceptable “minimum”, knowing that:

- The reference points for minimum speeds change rapidly (only a few years ago 512 Kbit/s was looked upon as high speed –today there are those who consider it to be an absolute minimum),
- For certain uses a speed of less than this minimum can be perfectly acceptable – above all if the investment to reach the “minimum” is significant and not needed.

Let us note that the ‘best effort’ character for the supply of internet access is the inevitable consequence of its very openness: the quality of a system that is not controlled by any player cannot be guaranteed by a particular player. The guarantee of quality is due to effective and equitable conditions of coordination between players – hence the importance of:

- Sending out relevant economic signals to players in order to ensure that ‘best effort’ internet enjoys a satisfactory quality of service,
- Which will encourage the use of more optimal network solutions for carrying each type of traffic such as, for example, Content Delivery Network (CDN) solutions.

Orange is of course ready to contribute to the Authority’s work on the notion of “sufficient QoS”.

However, the practical definition of a minimum for an issue involving multiple criteria and subject to being perceived differently according to the customer’s viewpoint, could prove to be particularly complex.

On the other hand, it is possible to send an economic signal to the various players (of the “termination data” type, invoiced to the transmitters of traffic) that would – if correctly calculated and applied – ensure a reasonable level of quality for ‘best effort’ internet.

II.4 4th recommendation: managed services

4th direction

To maintain all of the players’ capacity to innovate, all operators must be able to market “managed services” both to end users and information society service providers (ISV), in accordance with competition laws and sector specific regulation, and provided that the managed service does not degrade the quality of Internet access.

II.4.1 The possibility of being able to offer “managed services” would allow for the provision of quality services that could not technically be provided over the internet

Being able to offer managed services allows for the development of the ergonomics and the quality of service corresponding to a proven consumer need. In France, the development of broadband and, therefore, that of the internet and services, comes largely from the success of the triple play packages offered by the principal ISP.

The management of certain categories of services obviously needs to take place in the full respect for competition law and other applicable regulations.

It is important to emphasise that, **for certain services there cannot be, by the very way they are designed, such as the broadcasting of television programmes, the same situation and equal treatment between managed services and services provided over the internet.**

For example, if a programme as popular as the eight o'clock news on a major channel were only available on the services platform of an ISV connected to the internet, the fact of millions of television viewers all attempting to access the programme at the same time via the internet would cause traffic congestion that would be both difficult to control and would potentially penalise all internet users, whereas this sort of simultaneous access by millions of people is perfectly feasible as a managed service integrated into a triple play access. It is not possible to qualify this difference in services supplied to the customer as discriminatory, it is quite simply the result of two distinct technical channels (internet and managed services).

II.4.2 The development of managed services has and will continue to greatly benefit the internet

The interpretation that could be given to the reserves expressed at the end of the 4th recommendation regarding the loss of internet access quality for managed services poses a problem. The implied intention of operators to cause loss of internet access quality in order to favour their managed services in no way corresponds to reality.

On the contrary, historically all progress made to the networks to improve managed services have also been beneficial for internet access:

- For fixed line services, the adaptability of the internet enables it to make better use not only of its dedicated resources, but also of the capacity not used by managed services when they are not operating (for example, when the TV is not being used with multi-play access, the capacity initially earmarked for it can be allocated to the internet service),
- For mobile services, data services could not be provided at such competitive rates if traditional managed voice services did not already cover a large proportion of network coverage costs.

By making the most of the investments made over the past few years in managed services, the internet has greatly benefitted from using this temporarily available capacity. On the other hand, if managed services did not have priority for these shared resources when they need them they could not function correctly.

In conclusion, today the development of managed services improves the quality of the internet:

- By driving technological advances and increasing the capacity of the networks,
- By spreading the costs of shared infrastructure,
- By contributing to increasing the numbers of internet users thanks to the commercial success of multi-play offers,
- By allowing the internet to use the resources dedicated to managed services when the latter are not in use.

An unfortunate interpretation of the principle of “non-deterioration of internet quality

by managed services” should not be allowed, which would prevent operators from using temporarily available resources for the internet or place the players in a position whereby they cannot offer managed services with adequate quality of service.

II.5 5th recommendation: monitoring the market for data interconnection

5th direction

To eradicate the opacity that currently exists in data interconnection markets, and to obtain information that will be useful to exercising its powers, the Authority will soon be adopting a decision on the periodical collection of information on these markets. Based in part on this information, the Authority will later assess whether it is necessary to implement regulation in these markets.

We fully support the Authority's approach; the lack of transparency in data interconnection markets should not exist and there are problems.

The periodic gathering of data should concern not only the operators (ISP's and telecommunications carriers), but also the ISV's.

This should be enough to convince the Authority that a more widespread application of the rules for interconnection is justified, thereby making the operator generating the traffic to bear all or part of the marginal costs that the traffic causes (a "data termination" type system).

The gradual application of these rules would allow:

- telecommunications carriers and ISP's around the world to adapt and pass on the costs to the relevant ISV's,
- ISV's and operators to be motivated to implement traffic management mechanisms for the purpose of optimising the use of the networks while ensuring their funding and growth.

France could play a leading role in this movement.

II.5.1 IP traffic flowing at the interconnection with the Orange network is imbalanced: Orange suffers from unilateral increases in traffic

The comments that France Telecom Orange would like to make regarding the markets for data interconnection concern the disorderly behaviour of certain sites when transmitting data, behaviour that is shared by the telecommunications transit carriers. These sites are encouraged by the existence of peering agreements and the absence of any contribution to the variable costs of collection networks as well as mobile access networks.

The result is quality of service problems due to congestion, financial problems regarding the sizing of the network, problems with the allocation of resources shared between users of internet access and users of the internet as a carrier and difficulties in establishing appropriate price structures, especially for mobile data offers. France Telecom Orange is also confronted by the abnormal behaviour of certain powerful players on the global internet attempting to create inequitable conditions for access to the France Telecom Orange network.

France Telecom Orange is confronted with a major risk of **its networks being saturated** due to the massive transmission of data over the internet by traffic generators who currently pay for the use of networks at prices that do not allow it to cover the costs, even the marginal cost, of adapting its capacity to their traffic, including for collection and mobile access networks.

There is consequently an **increase in unilateral traffic** transmitted by players higher up in the internet value chain. This massive transmission of data that saturates the networks penalises emerging services being developed by the innovators of the internet.

On mobile networks, for example, as a network operator in the internet connection segment, Orange today is not in a position to give service providers rates that are consistent with the costs generated on the mobile network, as it is unable to make those who generate the traffic aware of the way in which their content takes up capacity on the network. For example, a mobile internet user can receive a web page containing a video that consumes large amounts of network capacity. This reduces the quality of service offered to all mobile internet users using the same cell of the network. As things stand, the designer of the site has no reason to optimise his design and it is up to Orange to adapt its offers and pricing for its customers by, in certain circumstances, for example, setting up a 'reasonable' quota for traffic. But it is still difficult, because retail customers have only limited control over the volumes of traffic they receive.

It is in the technical peering agreements channel that these excessive unilateral transmissions are most evident. France Telecom exchanges traffic with the peer operator without payment and on the understanding that certain rules are respected, especially in terms of the minimal volume of traffic exchanged and the balancing of that traffic. These agreements are almost never subject to formal contracts, but the vast majority of internet traffic nevertheless flows through the points that are covered by them.

Peering agreements carry no guarantee of quality (the connection is made according to the 'best effort' principle). The peering policy at Orange is publicly available; it allows for a maximum imbalance in the traffic of 2.5 (between incoming and outgoing traffic) for each player, with the result that there is on average an overall balance in the exchanges of traffic between peers.

For a few years now France Telecom has noticed a continuous erosion of the Incoming / Outgoing ratio for exchanges of traffic in the framework of its peering agreements. The following graph illustrates this continuous erosion of the ratio with an acceleration in 2008. [Privileged information].

II.5.2 The extremely powerful position of certain internet players has rendered the attempts undertaken by European operators to avoid congestion and to control the situation fruitless.

[Privileged information]

II.5.3 The progressive implementation of "data termination" would help to resolve the problems encountered with congestion

[Privileged information]

II.5.4 “Data termination” would stimulate the implementation of innovative network management solutions

The increase in speed and traffic on the networks:

- Should go hand in hand with an adequate method for funding, corresponding to the use of domestic and international transit networks,
- Which should then also allow for the parallel deployment of solutions aimed at reducing and optimising the costs of national and international transit.

Today, a large part of the traffic on domestic networks is made up of carrying the same content thousands of times to different users. At the same time, technical solutions such as Web caches and CDN's exist and allow for significant reductions to the traffic in the networks by avoiding certain redundancies and improving the quality as perceived by the end users.

Any changes to the regulation should promote this sort of optimisation of costs and quality;

- By allowing ISP's to use Web caches in a transparent fashion in their networks for internet content from those ISV's that generate large volumes of traffic,
- Which should also help to promote the implementation of exchanges and interconnections of the CDN's belonging to the ISP's with other CDN's around the world.

II.6 6th recommendation: increased transparency for the end users

6th direction (1st element)

ISPs must provide end users with clear, precise and relevant information on the services and applications that can be accessed through their data services, of the traffic management practices employed on their networks, the quality of service of these offers and their possible limitations. As a result, the terms “Internet” and “unlimited”, for instance, must only be used if they satisfy the terms defined in section II.a and ff. Moreover, the Authority is committed to a system whereby ISPs will periodically publish quality of service indicators that are specific to their retail market data services.

II.6.1 Operators already have obligations of transparency toward their retail clients

Let us firstly remember that operators do have obligations of transparency toward their retail clients both under consumer law and article D98-12 of the CPCE, which sets out the rules for user information, for example concerning the conditions regarding quality of service.

We understand that the 6th recommendation might be aimed at extending the scope of application of this article and thus the powers of ARCEP in the field of consumer protection, without for all that being accompanied by an enlargement of its initial attributions and, it seems to us that this raises a legal question about its area of jurisdiction.

At the last meeting of the CNC in July 2010, attended by ARCEP, the DGCCRF clearly stated the limits to be respected for this debate. With the current state of the law, operators enjoy considerable freedoms concerning the use of the term unlimited. Thus, the CNC and the DGCCRF cannot impose conditions for the use of the term unlimited on operators that would have an impact on pricing structures by, for example, going so far as to ban the use of the term. Given this, the CNC and the DGCCRF can at best ensure that the use of the term unlimited in the context of advertising by operators does not undermine the principle of informed consent by the consumer. In any event, it is the sole decision of the operators to use the term unlimited as they see fit depending on the way their offers are structured.

In conclusion, any potentially abusive use of terminology to describe the characteristics of an offer may only be punished by a common law judge in line with current legislation and following an accusation by an interested party in the legal sense of the word.

II.6.2 The potential adoption of increased measures of transparency for internet users should go hand in hand with an obligation of transparency imposed on other internet players

Adopting increased measures of transparency for internet users for the purposes of achieving enhanced neutrality for the public internet should go hand in hand with an obligation of transparency to be imposed upon other internet players, namely those who directly supply services to end users that consume large amounts of bandwidth, the ISV's.

As this type of measure and the players it would address do not come under the jurisdiction of ARCEP, the legislator could perhaps insert such a provision into the consumer code and entrust the DGCCRF with monitoring it.

It is also necessarily to come to a relatively precise definition of what 'data services' are or could be.

6th direction (2nd element)

The Authority therefore recommends that:

- In the case of offers of partial access to the services available on the Internet, due to the blocking (outside the scope of regulatory obligations) of certain services, websites or protocols, which is generally the case on mobile networks today, operators cannot qualify these offers as "Internet access" so as not to mislead end users. Only an offer that has all the characteristics of "Internet access" (see above) may employ this terminology;
- the term "unlimited" cannot be used to describe service offerings that include "fair use" type limitations that restrict consumption over time.

II.6.3 Use of the word 'internet' should be associated with a generic principle of openness, but its exact meaning should be subject to discussion and not a fixed principle based on technical criteria

The ongoing debates are intended to ensure neutrality for the public internet, which should above all benefit the users.

The recommendation to only use the term internet according to technical criteria and not based on actual customer usage seems to us to be excessive and would involve a high risk of confusion among consumers, which is contrary to the spirit of the envisaged measures for transparency.

France Telecom Orange favours a generic principle of openness for all services made accessible over the internet. However, not only theoretical principles must be taken into account, but also the real consequences of a total and uncontrolled openness on the performance of networks and the quality of service as perceived by the consumers.

This approach has historically been adopted for the fixed line broadband network for certain services:

- E-mail: per default we automatically offer the activation of an anti-spam filter (requested by the majority of customers) and restrict access to port 25 (which

enables the sending of e-mails from a server hosted by the customer, potentially without him knowing). The technical protocols do not allow for this type of restriction, but an informed customer can host an SMTP server by using an Orange relay server.

- Ping: in order to protect terminals from attack, the livebox firewall intercepts pings. A well informed customer can nevertheless deactivate this arrangement.
- Fixed line IP address: an IP address is allocated to a fixed line customer by default for a limited term and a private IP address is allocated to a mobile customer (due to limited IPv4 resources), but a paid for option for a fixed line allows for a public IP address.

Other considerations of a legal nature can intervene. For example when certain Newsgroup services have found themselves at fault regarding intellectual property laws, France Telecom has had to restrict access when a court has ordered their closure.

In order to be able to propose offers at an attractive price, while optimising network resources, it is thus reasonable to be able to structure the offers, especially for mobile, according to the principle:

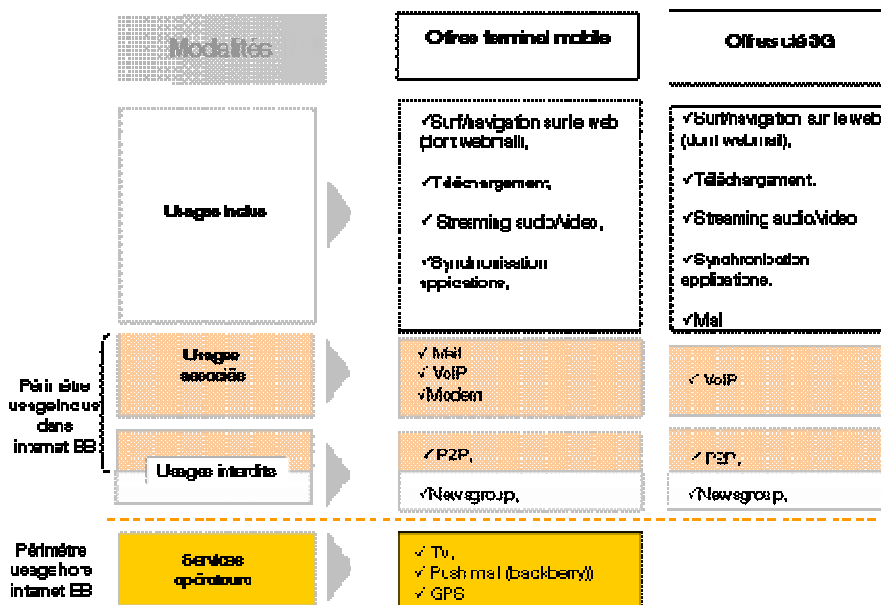
- Of basic “internet” access (including browsing, legal downloading, streaming and connections to applications),
- Of access options (free or paid for) to services not included.
 - This option is available for VoIP across all our offers,
 - Over time, Orange offers with internet will systematically include e-mail (some current offers distinguish between the two because mobile e-mail usage has historically been developed before mobile internet usage (which had to wait for the arrival of terminals with more suitable ergonomics before taking off),
 - The inclusion of such an option (or offer) could be examined for peer to peer.

We would also note that for mobile telephony, the use of the term “telephony” has not been questioned, even though the mobile customer experience is clearly very different. The term “telephony” has often been qualified by the terms “portable” or “mobile” as the market has become better educated without having to produce regulation for the terminology.

Today it is clear (as illustrated in the table below) that:

- The characteristics of basic mobile access are different from those of basic fixed line access,
- Neither of these types of access corresponds to the definition of “internet access” as formulated in the recommendations proposed by the Authority.

Périmètre actuel internet et services opérateurs dans les offres mobiles



The use of the word “internet” should therefore be associated with a generic principle of openness and its exact meaning be subject to discussion and not depend on a set principle based on technical criteria.

It seems to us that the search for a solution should involve more information and consultation between the parties (public authorities, consumer associations and operators) and, as far as possible, should be based on objective facts.

II.6.4 It therefore seems to us that the focus should be on the term “unlimited”, which is now the subject of discussions with the consumers associations.

II.6.4.1 Use of the term unlimited should not constitute a misleading commercial practice.





Today, there are no legal, regulatory or ethical provisions banning the use of the word “unlimited” in commercial communications. However, use of the term “unlimited” should not constitute a misleading commercial practice.

Use of the term “unlimited” is dealt with in two declarations by the CNC dating from 23rd June 2006 (written advertising in the electronic communications sector) and 27th March 2007 (audiovisual advertising in the electronic communications sector), according to which presenting the term “unlimited” as an essential characteristic of an offer must be accompanied by a clearly identifiable statement correcting the principal claim.

Consumer legislation does not, therefore, ban the use of the term unlimited in the commercial communications of operators. It provides for a certain freedom for its use.

An assessment of the practices of other European operators shows us that the use of the term unlimited – as for the term internet - for offers including a “fair use” clause is very widespread.

Comparaison européennes des offres Internet mobile (hors clé 3G)

 T-Mobile: - Promesse illimité (Fu: 300 Mo, 1 Go, 3Go. Réduction: 64/16 Kbps) - 200 Mo Vodafone: 200 Mo, 300 Mo, 1Go O2: promesse illimité (Fu: 200 Mo, Réduction: GPRS)	 Movistar: promesse illimité (Fu: 100 Mo, 1 Go. Réduction: 64/16 Kbps) Vodafone: promesse illimité (Fu: 300 Mo, 500 Mo et 1Go. Réduction: 384 Kbps) Orange: -promesse illimité (Fu: 500 Mo, Réduction:128 Kbps) -300 Mo, 100 Mo
 TIM: promesse illimité (Facturation ko au delà 200 Mo/semaine) Vodafone: 500 Mo (semaine), 2Go (Mois) Wind: promesse illimité (Fu: 1Go, réduction: 32 kbps)	 O2: - promesse illimité => 30/09, - 500 Mo, 750 Mo et 1 Go, Vodafone: 500 Mo, 1024 Mo (facturé au- delà) T-Mobile: promesse illimité (Fu: 1Go, 3Go, réduction pas précise), Orange: -Promesse illimité (Fu: 750 Mo, réduction pas précise) -500 Mo

Finally, the international players (ATT, O2) having stopped unlimited internet with a fair use clause, did so for financial and not consumer-driven reasons (network congestion).

II.6.4.2 Offers including a “fair use” type mechanism correspond to a market demand and need

It should firstly be noted that offers including a “fair use” type mechanism are highly appreciated by our customers. Their numbers have grown [Privileged information] between June 2009 and June 2010 going from [Privileged information] to [Privileged information] million customers.

“Fair use” type offers have the following characteristics:

- They guarantee that the consumer has no nasty surprises with the rates charged (because after “fair use”, he simply has reduced speed, but no additional charges),
- They encourage the consumer to use simple mechanisms to make reasonable use of the network (typically by activating the Wi-Fi function on his terminal, the user with coverage from a ‘box’ is no longer using the mobile network and does not consume his “fair use”),
- Reduced speed, having reached the limit, affects less than [Privileged information] % of users with consumption distinctly greater than the average:
 - In practice, [Privileged information] % of customers never encounter a “limit”;
 - For customers reaching the limit, the arrangement set up by Orange enables continued use, but with a lesser degree of comfort (longer time for downloading and reduced resolution for pictures and sound).

Access to the majority of services is thus maintained through the maximum theoretical speed relating to “fair use”. It is important to clarify this point as it does not bring the perception of unlimited into question,

- Finally, nominal usage resumes at each new invoicing period.

Offers with “fair use” therefore correspond to a real market demand and can be as innovative and structuring as the early pre-paid offers for mobile and it is important that operators continue to be able to commercialise them.

The explosion of different uses of the internet is a long term phenomenon. Under these conditions maintaining offers with unlimited volume (particularly for today’s mobile and potentially in the longer term for fixed lines) can only be envisaged if at the same time bit rate can be limited.

II.6.4.3 Orange is not opposed over time to relinquishing use of the word “unlimited” for offers including a “fair use” type mechanism, providing that this results in a change for the whole sector and is adopted by all the operators

We understand that limiting the bit rate is sometimes interpreted as being contradictory to the term “unlimited”.

As demonstrated above, this apparent contradiction, in practice only encountered in exceptional cases and with limited effect, does not seem to us to pose a problem regarding consumer law. Furthermore, we would point out that the description “unlimited” for these offers only gives rise to a very low level of complaints by consumers: in May 2010, [Privileged information] customers with this offer made complaints to Orange and this is a very low rate.

Nevertheless, if, in spite of the low level of complaints or litigation under the terms of consumer law, the practice (limiting bit rate over and above a certain volume for offers described as unlimited) were to become unacceptable, Orange would not oppose, over time, relinquishing the use of the word unlimited in its commercial communications for offers including a “fair use” type mechanism.

However, this move would have to result in a change for the whole sector driven by the governing authorities and bodies. In fact Orange could not make such a move on its own without taking the risk of its customers no longer understanding its commercial communications as compared to the norms for communication in the market place. On the other hand, if market practices were to move in the direction of no longer using the term “unlimited” in commercial communications, Orange would align itself with that practice.

II.6.4.4 It should nevertheless remain possible to introduce, even in “unlimited” retail offers, clauses enabling operators to protect themselves from abusive usage

The use of the term “unlimited” such as defined during the CNC meeting on 8th July 2010, does not exclude the possibility of introducing, even in “unlimited” retail offers, clauses enabling operators to protect themselves from abusive usage, particularly where the resale of traffic is concerned.

This is already the case for unlimited fixed line offers.

II.6.4.5 The systematic ban on blocking VoIP services appears to be excessive and unjustified.

On page 34 the Authority writes that “even in the case of data offers not labelled ‘internet access’, the blocking of VoIP services (e.g. Skype) would not in principle appear to be legitimate”.

Orange offers a VoIP activation option for its full range of products, but believes that such a ban as expressed by the Authority is excessive and unjustified for the following reasons:

- Such a ban on commercialising a particular type of offer would be in contradiction with commercial freedoms and would furthermore be discriminatory except if all the offers giving access to certain services available on the internet were prohibited, which would clearly be incomprehensible,
- VoIP services use more resources than telephony for the same vocal usage and, for a traditional voice service, take up resources intended to cater for new data usages,
- Such a ban would result in more expensive offers:
 - Current rates are in fact intended to encourage new data services to take off and do generally only cover incremental costs, the fixed costs of operators normally being borne by the voice service. Such a model is only possible if the substitution rate of voice by data services is low,
 - If the substitution were to become significantly higher the infrastructure would, on the one hand, be very badly used to the detriment of all consumers and all services (the voice channel would be “deserted”, the data channel would be “overwhelmed” by very inefficiently encoded voice services to the detriment of all the new online applications for mobile) and, on the other hand, it would be necessary to make significant readjustments to rates and thus increase the prices for data services.

6th direction (3rd element)

The Authority will complete its work, in tandem with the DGCCRF and consumer associations:

- to define, with the leading ISPs and the associations that represent them, common best practices for “fair use” policies for situations when they are relevant;
- to have quality of service indicators that are specific to retail market data services published periodically, notably for “Internet access”, both fixed and mobile.

We support the Authority’s approach aiming at “completing the work on quality indicators in association with the DGCCRF and consumer associations”. We actively participate in the work done by the DGCCRF and are also in touch with the consumer associations.

III Other aspects of neutrality

Question:

No. 5) The Authority invites the players to comment on its analysis of the other dimensions of neutrality

Chapter III of the public consultation document examines challenges other than those linked directly to internet access, but that could also be concerned by the question of the neutrality of public internet.

France Telecom Orange concurs with the Authority's analysis stating that the issue of neutrality should not be limited to just the market for electronic communications. It is in fact the whole value chain of public internet that needs to be examined. As the Authority points out, the major players have developed over the past few years and have conducted their business directly over the internet or by using hardware that constitutes the means of accessing the internet. Some of these players have very important market positions.

It is the case for search tools such as search engines and the associated advertising offers that appear to the consumers as the omnipresent keys to accessing the internet, enabling them to see what content is available and to thus exercise choice by using these tools. The mirror image of this is that these tools constitute, for the majority of web site publishers, the tools of reference providing them with visibility on the web. It is thus these indexations, paid for or free reference points that direct users in their choice of content or services.

Above and beyond the means that enable a user to search for and find information about the content and services available on the internet, there are, upstream, internet access medium. The range of traditional terminals represented by computers now finds itself joined by mobile and so-called "internet connectable" terminals (televisions or games consoles). These terminals, via their technical configuration and the commercial offers proposed by their producers, can also be very structuring in their choice of content and methods of accessing information for the user and, in the same way, for the suppliers of services and content who use IP technology as their medium.

The important players in these sectors are not in the majority European and, as pointed out by ARCEP, one of the challenges of the debate surrounding the neutrality of the internet is indeed to take into account the international nature of the value chain. For France Telecom Orange it is a major issue in the whole question of the neutrality of the internet.

It is indeed important that all players involved in the same area of activity, whatever it may be, are subject to, if not identical rules, at least rules of a type that does not unjustly distort competition between those players.

III.1 Exclusivities

Concerning exclusivities, and with the exception of access to channels (see the following arguments), France Telecom Orange shares the position presented in the ARCEP consultation document about the fact that exclusivities are currently already effectively regulated and controlled by the competition authority. Thus, in general, exclusivities merit examination on a case by case basis and cannot be subject to general provisions that might risk to create competitive advantages or disadvantages in the market place. Concerning the acquisition of the content rights, let us recall that the principle of the exclusivity of certain rights has always been recognised and acknowledged with respect to the rules for evaluating the value of an investment.

It is, after all, the requirement to examine on a case by case basis that the Supreme Court restated in the judgement it gave on 16th February 2010 in the “iPhone case” by rendering null and void the Appeal Court's decision that confirmed the competition authority decision. The Supreme Court considered that the Paris Appeal Court had not carried out a thorough examination of the size of the investments made by Orange in exchange for the exclusivity granted by Apple to Orange.

The Authority quite rightly emphasises the issue of exclusivities and of access to audiovisual content. Such access has become essential for telecommunications operators. In fact, the massive investments needed to build and maintain networks can only be financially justified by the revenues they can be expected to generate. Against a stable background, or even one in which revenues from access decline, the revenues drawn from services, including audiovisual services, are essential in order to balance the investments made in the current (3G, ADSL) and future (4G, fibre...) networks.

The difficulty of distributing certain types of exclusive contents, namely the majority of the most attractive television channels, has led France Telecom Orange to develop new television services. The creation of new channels in turn led to new investments in the production of contents in an economic context that was difficult for the audiovisual sector.

The strategy for content also depends on the open partnerships concluded with third party producers and publishers which, apart from the distribution of more than 170 television channels, have also led to Orange subscribers being able to access France Television catch-up tv services; M6 and Canal+ and the enhanced MyTF1 portal.

As noted by the Authority, the exclusive distribution and carrying practiced by France Telecom Orange for some of its channels has been examined on a number of occasions by the relevant authorities. In this respect it should be noted that all of these investigations have highlighted the absence of any anti-competitive consequences due to the exclusive carrying of content owned by France Telecom Orange in the markets in question¹¹.

In parallel, the adverse effects of the concentration and locking in of the principal distribution exclusivities by the dominant player in the pay TV market are well

Decision ref. 08-D-10 by the competition authority on 7th May 2008 ; Notice from the CSA (audiovisual council) on 15th January 2008 ; Notice from the CSA on 17th March 2007; Notice from ARCEP ref. 2009-0172 on 19th March 2009; Notice from the Competition Authority ref. 09-1-42 on 7th July 2009; Report to the Prime Minister by Mme. Marie-Dominique Hagelsteen.

established. The report by the Hagelsteen mission, the conclusions of which are referred to by the Authority, thus makes the case for a law to regulate the wholesale market for pay television.

The situation for this market is in fact all the more worrying, in view of the above-mentioned challenges of funding the networks, that the exclusivities held by the dominant player in ADSL networks tend to systematically spread to the FTTx networks.

Finally, the pay television market is characterised by significant and lasting discrimination between the telecommunications operators and the principal cable operator, the latter having access to all the most attractive thematic channels on an unbundled basis, including on the FTTx networks.

In summary.

- We share the position presented about the fact that **exclusivities are already currently effectively regulated and controlled by the competition authority**.
 - They nevertheless merit examination on a case by case basis and cannot therefore be subject to general provisions that might be in danger of creating competitive advantages or disadvantages in the market place.
- The situation remains worrying and discourages investment, because
 - the pay television market is characterised by significant and lasting **discrimination between the telecommunications operators and the principal cable operator**, the latter having access to all the most attractive thematic channels on an unbundled basis, including on the FTTx networks.
 - the balance of investments in the current (3G, ADSL) and future (4G, fibre...) networks largely depends on the ability of operators to generate revenues by offering attractive managed services, including audiovisual services.

III.2 The neutrality of terminals

III.2.1 The obligations regarding the publication of technical interface specifications and the pre-configuration of terminals affect operators, but no equivalent provisions exist for the manufacturers of terminals.

The consultation document quite rightly notes, regarding the sector-based regulation, the existence of the directive of 9th March 1999 concerning equipment for terminals, which was instrumental in avoiding issues with compatibility and interfaces between networks. As it is so rightly stated, this regulation concerning terminals does not work both ways as it is a source of obligations only for operators and not for manufacturers. France Telecom Orange considers that obligations comparable to those of the operators should usefully be established for the manufacturers in view of the way in which the market for terminals has changed.

France Telecom Orange would like to remind that mobile operators in France are also subject to rules adopted by the Authority covering the configuration by the operators of terminals that they offer and also for the take up of mobile internet (reiterated in Orange's 3G licence). These are in particular obligations of information, of non-discrimination and configuration specifically aimed at service providers.

Such rules (publication of the technical specifications for the interfaces between networks and terminals, rules regarding pre-configuration - SIM locking - and the configuration - for certain service providers - of terminals) do not exist for the manufacturers of terminals themselves, who are today nevertheless taking an increasingly significant share when it comes to the configurations necessary for the provision of services they carry or make accessible.

Indeed, such rules would be tantamount to asking terminal manufacturers to publish and document native API's¹² (a measure that was imposed on Microsoft for Windows by the European Commission following investigations on infringement of competition law), to ensure the "neutrality" and the openness of the kiosks natively associated with certain terminals, and to enabling users to more easily modify the parameters for the configuration of terminals as predefined by the manufacturers.

The existence of a fragmented market for terminals thus translates into an increased potential for manufacturers to innovate...but also into restrictions on consumer choice when they want to download applications or modify the initial configuration of their terminal, or when they want to change terminals.

The application of rules designed to guarantee the "neutrality" of terminals, also promoted by the Wholesale Applications Community (WAC), would therefore seem to be desirable in order to allow for the development of mobile multi-media and to avoid dubious practices that could be dealt with by commercial law, but with a very distinct effect from *ex-ante* regulation, and finally also to ensure symmetry of obligations.

Without symmetrical obligations, **one must question the grounds for maintaining the obligations imposed exclusively on operators** (publication of the technical specifications for interfaces between networks and terminals, rules concerning pre-configuration for certain service providers), in view of the current configuration practices of some terminal manufacturers.

¹² Application Programming Interface: software interface between external applications and the PC or terminal operating system.

III.2.2 Operators are subjected to specific obligations in terms of the gathering and processing of certain personal data, particularly traffic data, whereas other players in possession of similar information are subject only to common law, which should at least be applied in an effective manner

Equivalent treatment seems important when it comes to obligations for the gathering and processing of personal data when subscribing to the services in question and especially for the use of data resulting from user habits collected through the services visited on terminals. In fact, if operators are today subject to sector-based rules that protect privacy, players active in services that use almost exactly comparable data to those which the operators have thanks to the data provided by the terminal and the pre-configured platforms within it, are not subject to a framework that provides the same degree of protection and / or are not as closely monitored, which leads to a lack of security for the protection of the customers' personal data.

For these reasons, France Telecom Orange will be very closely monitoring the discussions regarding the revision of the European directive on privacy and the future modification of the freedom of information act that will follow on from it in order to be sure that guarantees are given to the end users concerning the use of their personal data and the processing of it by these new services controlled by players who are often operating services platforms that have been pre-configured in the terminals outside the country. For the more immediate future, and as indicated earlier on in this document, France Telecom Orange supports the international initiative taken by the authorities responsible for the protection of privacy.

III.3 Connected televisions

III.3.1 A multitude of terminals and innovative technical solutions will help to enrich the interactive audiovisual experience

There is a new change on today's horizon concerning the use of the television set or, more accurately, the television screen: all compatible televisions will be able to have access to interactive services.

These new services will reach television audiences through different channels and technologies:

- Numerous internet access providers have already developed and installed interactive applications that function with a Set Top Box (STB) installed by the distributor and which is directly plugged into the television set using a scart (analogical) or HDMI (digital) cable.
- Using a television connected via an ISP
The "connected television" generally means this category of television sets. The technology requires a "client" device within the television set that interfaces with the traditional internet network, displays a portal on the screen and buttons, thumbnails and widgets and generates the selections made by the television viewer using his remote control.
In practice, the television manufacturers tend to develop proprietary solutions, but nevertheless using standard bricks. The HbbTV standard could well be implemented in this context.
- Apart from television sets, other mass market hardware, such as the latest generation of games consoles, are also connected to the internet. Except for computers, the first mass market electronic terminal in the home to be connected to the internet remains the games console. Approximately 70 % of such consoles are connected to the internet by their owners, meaning more than 100 million machines around the world today and 225 million by 2013. These consoles offer a range of services including video games, VoD and internet browsing (source: IDATE survey, January 2010).
- Finally, the radio-electrical spectrum managed by the CSA permits, under the terms of the law governing audiovisual, the provision of interactive services. The CSA has been experimenting for a few months with push VoD services on the radio-electrical frequencies that it manages, access to which is not subject to payment of a tax or licence – thus illustrating the absence of "neutrality" in the ability of profit companies to access the spectrum.

France Telecom Orange also participates in these technological changes through its ADSL television offers that it proposes in the context of its triple play packages and, more recently also through a partnership with the manufacturer LG Electronics that was signed on 7th January 2010 for connected televisions sold by LG in France.

Concerning connected TV's, France Telecom Orange considers that it is a technological change that enables the internet to be brought to a mass market screen with simplified and intuitive access to web type content and services, thus enabling more varied usages. Orange thus offers, through this partnership, a portal designed to give customer a new experience that complements traditional TV. In just

a click the user accesses a portal offering a wide selection of practical and entertainment services.

III.3.2 Connected TV's could be subject to exclusivities, limited in duration and in scope in conformity with competition law

The development of these new television sets thus represents technological progress encouraging investments by the various players that could, in conformity with competition law, justify exclusivities limited in duration and scope taking into account those investments. These technological developments are of a nature that favours new types of usage and, in France Telecom Orange's opinion, complete the way in which traditional TV is used.

However, the development of these usages for terminals must take place within a legal and regulatory framework ensuring equivalent treatment for players proposing identical or similar services whatever the medium or technique chosen to bring them to the public.

III.3.3 Players offering audiovisual services should be subject to the same legal framework (including for the funding of creation), whatever the means of access, the technique or the country from which the services are offered

Players offering services belonging to the category of audiovisual media should be subject to the same regulatory framework, whatever the means of access or the technique proposed or even the country from which the services are provided if they reach the same local population.

The regulation set out in the Audiovisual Media Services directive recommends, in particular for on-demand services, a lighter regulation than for traditional television services. Indeed, overly strict regulatory measures would prevent the emerging market for VoD from continuing its rapid growth.

The French transposition of the directive, which began with the law of 5th March 2009, is now being finalised with the forthcoming publication of the decrees for its application and the deliberations of the CSA. It would be desirable in this case to avoid the pitfall of regulations for online and offline services being too close, which would be very far from the spirit, if not the letter, of the directive. Generally speaking, too strict a regulatory framework for innovative services (video on demand, catch-up television etc.) would be likely to have adverse consequences on the viability and the development of these services by players coming under the French jurisdiction.

For VoD, even more so than for television services, constraints affecting investments, the catalogs and scheduling could easily be circumvented by sites or platforms located outside the country. Given the current state of the regulation applicable in France, these same sites would contribute only a little or nothing at all to the financing of production.

The France Telecom Orange group, while restating that the development of VoD contributes to reducing piracy, recommends:

- A flexible regulation of SMAD's when applying the directive,
- A rebalancing of the regulation to avoid any circumvention in particular by connected terminals.

On this second point, it should be emphasised that the decree currently being prepared and intending in particular to combat the offshoring of audiovisual services is in danger of being ineffectual, both with regard to the criteria selected for establishment and in terms of its scope of application, limited to European Union Member States.

Apart from the regulatory and legal framework and its application to different types of players offering comparable services, the question of the use of access network resources will also arise as the traffic increases. In fact, hardware enabling the viewing of content using large amounts of bandwidth capacity should, like all the other large consumers of resources discussed above, contribute to a fair remuneration for the network resources that they use (regarding this point, please refer to the arguments on “data termination” in section II.5).

The France Telecom Orange group, while restating that the development of VoD contributes to reducing piracy, recommends:

- a flexible **regulation for on-demand audiovisual media services**, in line with the Audiovisual Media Services directive
- a rebalancing of the regulation to avoid any circumvention in particular by connected terminals - for VoD, even more so than for television services, **constraints affecting investments, catalog and scheduling could easily be circumvented by sites or platforms located outside the country**
- hardware enabling the viewing of content using large amounts of bandwidth capacity should **contribute to the fair remuneration of the network resources that they use**

III.4 Neutrality and privacy

Current French law is rich in terms of provisions relating to the protection of personal data and has demonstrated its ability to adapt to new developments.

These obligations are, however, essentially national and European in nature. Today it seems necessary to fill the regulatory gap that exists in this area between Europe and the rest of the world. This year has shown how much the internet users are often fearful about the initiatives taken by the really big internet players. The recent letters sent to Google by the authorities in charge of protecting personal data are evidence that public authorities are now becoming more aware. Improved protection of privacy requires the application of “identical” regulation for all the players who, today, are not subject to the same obligations due to their geographic location and also their legal status.

It would notably be right to be able to enforce the relevant legal provisions for all foreign players (especially the Americans) who propose services and products to European internet users. This is why the Madrid resolution of 5th November 2009, adopted by nearly 80 bodies involved in the protection of privacy, and which constitutes the first step towards an international convention, deserves to be applauded and encouraged.

Europe could also go further and attempt to impose that the personal data of European citizens or personal data gathered within Europe should be stored within its territory. The threat of such an obligation could encourage the non-European players to take more notice of the demands for greater respect of the right to privacy.

Furthermore, even within the boundaries of the European Union, it would only be right for the principle of mutual recognition to be extended to the protection of personal data in such a way as to simplify and render more effective the implementation of new European wide data processing.