

Draft decision on the implementation of a quarterly campaign for gathering information on the technical and pricing terms governing data conveyance and interconnection

Public consultation  
from 23 December 2011 to 17 February 2012

## Disclaimer

France's Electronic communications and postal regulatory authority (ARCEP) is submitting a draft decision on the implementation of a quarterly campaign for gathering information on the technical and pricing terms governing data conveyance and interconnection. This document can be downloaded from the ARCEP website.

The French version of this document is the sole authentic. This English version is provided for information.

Stakeholders are being asked for their opinions on the whole of this document, and their responses must reach ARCEP – in English or in French, preferably via e-mail to [neutralite@arcep.fr](mailto:neutralite@arcep.fr) – **by 17 February 2012**. By default, they may be sent via the post to the following address:

Réponse à la consultation publique sur la mise en place d'une collecte trimestrielle d'information sur les conditions techniques et tarifaires d'interconnexion et d'acheminement de données

A l'attention de : M. Philippe Distler, Directeur général

Autorité de régulation des communications électroniques et des postes

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The stakeholders are invited to respond to the questions found at the end of the present document which is being submitted for public consultation and, more generally, to provide any piece of analysis that they believe is relevant for the Authority.

For the sake of transparency, ARCEP will publish all of the responses it has received, with the exception of those protected by trade secrecy. To this end, respondents are asked to put those elements they consider covered by trade secrecy in a separate appendix that is properly identified as such. Also with a view to being transparent, respondents are asked to limit the amount of information protected by trade secrecy as much as possible.

**Electronic Communications and Postal Regulatory Authority**

**Draft Decision No. 2012-XXXX**

**of XXXX 2012**

**on the implementation of a quarterly campaign for gathering information on the technical and pricing terms governing data conveyance and interconnection**

The Electronic communications and postal regulatory authority,

Pursuant to Directive 2002/21/EC of the European Parliament and Council of 7 March 2002 on a common regulatory framework for electronic communications networks and services (Framework Directive), amended by Directive 2009/140/EC of the European Parliament and Council of 25 November 2009<sup>1</sup>;

Pursuant to Directive 2002/19/EC of the European Parliament and Council of 7 March 2002 on access to electronic communications networks and associated resources (Access Directive), amended by Directive 2009/140/EC of the European Parliament and Council of 25 November 2009;

Pursuant to Directive 2002/22/EC of the European Parliament and Council of 7 March 2002 on universal service and users' rights relating to electronic communications networks and services (Universal Service Directive), amended by Directive 2009/136/EC of the European Parliament and Council of 25 November 2009<sup>2</sup>;

Pursuant to the French Postal and Electronic Communications Code (*Code des postes et des communications électroniques*), referred to hereinafter as CPCE, and particularly Articles L. 32-1, L. 32-4 and L. 36-8;

Pursuant to the conclusions of the European Council of 13 December 2011 on the open internet and Net neutrality in Europe<sup>3</sup>;

Pursuant to the Electronic communications and postal regulatory authority's proposal and recommendations on internet and network neutrality, published on 30 September 2010;

and following its discussions, held on XXXX 2012;

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<sup>1</sup> Directive 2009/140/EC of the European Parliament and Council of 25 November 2009 amending Directives 2002/21/EC on a common regulatory framework for electronic communications networks and services, 2002/19/EC on access to, and interconnection of, electronic communications networks and associated facilities, and 2002/20/EC on the authorisation of electronic communications networks and services.

<sup>2</sup> Directive 2009/136/EC amending Directive 2002/22/EC on universal service and users' rights relating to electronic communications networks and services, Directive 2002/58/EC concerning the processing of personal data and the protection of privacy in the electronic communications sector and Regulation (EC) No. 2006/2004 on cooperation between national authorities responsible for the enforcement of consumer protection laws.

<sup>3</sup> 3134<sup>th</sup> Transport, Telecommunications and Energy Council.

## I. Applicable legal framework

As part of the transposition of the European Directives of 2009 through Order No. 2011-1012 of 24 August 2011 concerning electronic communications, some of the powers assigned to the Electronic communications and postal regulatory authority (hereinafter referred to as ARCEP) were expanded to include providers of public online communication services (hereinafter PPOCS).

The Law of 21 June 2004 on confidence in the digital economy or LCEN (*Loi pour la confiance dans l'économie numérique*), defines online public communication services as follows: “*all transmissions, upon individual request, of digital data that does not constitute private correspondence, through an electronic communications process enabling the reciprocal exchange of information between the sender and the recipient*”.<sup>4</sup>

ARCEP is now empowered to resolve disputes relating to the “*reciprocal technical and pricing terms and conditions governing traffic routing between an operator and an undertaking providing public online electronic communications services*” (Article L. 36-8, II).

Moreover, CPCE Article L. 32-4 was extended so that ARCEP’s power of enquiry and data gathering is expanded to include PPOCS, on matters concerning the technical and pricing terms governing traffic routing.

This Article therefore now stipulates that:

*“The minister responsible for electronic communications and the Electronic communications and postal regulatory authority can, in a manner proportionate to the requirements attached to the performance of their duties, and based on a reasoned decision:*

*1) Gather from legal entities or natural persons operating electronic communication networks or providing electronic communication services the information or documents needed to ensure that these undertakings are complying with the principles set out in Articles L. 32-1 and L. 32-3, and with the obligations imposed upon them by the present code or by the texts adopted for its enforcement;*

*2) Gather information and documents concerning the technical and pricing terms of traffic routing applied to their services from undertakings that provide online public communications services.*<sup>5</sup>

*3) Conduct surveys of these undertakings.*

[...]

*The minister responsible for electronic communications and the Electronic communications and postal regulatory authority will ensure that the information gathered in application of this article is not divulged if it is protected by a matter of secrecy listed in Article 6 of Act*

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<sup>4</sup> Article 1 of Law No. 2004-575 of 21 June 2004 on Confidence in the digital economy. It is worth mentioning that this notion is very close to that of an information society service provider which exists in European law and defined as “*any legal entity or natural person that provides an information society service, in other words any service provided by means of electronic equipment and at the individual request of a recipient of a service.*” Directive 2000/31/EC (E-commerce Directive) and Directive 98/34/EC, as amended by Directive 98/48/EC.

<sup>5</sup> Underscoring added.

*No. 78-753 of 17 July 1978 concerning various measures for improving relations between the government and the public, and various administrative, social and fiscal provisions.”*

Furthermore, Article 5 of the Framework Directive of 7 March 2002, as amended by Directive 2009/140/EC, provides for the possibility of having national regulatory authorities gather information from enterprises that provide electronic communication networks and services:

*“1. Member States shall ensure that undertakings providing electronic communications networks and services provide all the information, including financial information, necessary for national regulatory authorities to ensure conformity with the provisions of, or decisions made in accordance with, this Directive and the Specific Directives. In particular, national regulatory authorities shall have the power to require those undertakings to submit information concerning future network or service developments that could have an impact on the wholesale services that they make available to competitors (...)*

*Undertakings shall provide such information promptly upon request and in conformity with the timescales and level of detail required by the national regulatory authority. The information requested by the national regulatory authority shall be proportionate to the performance of that task. The national regulatory authority shall give the reasons justifying its request for information and shall treat the information in accordance with paragraph 3.”*

ARCEP therefore has the power to gather information on the technical and pricing terms of data conveyance and interconnection from electronic communications operators<sup>6</sup> and from PPOCS, in a manner proportionate to the performance of its duties.

Also worthy of reminder is that, by virtue of CPCE Article L. 32-1, ARCEP has the task of ensuring:

*“[...] Para. 4 – The definition of terms governing access to public networks and the interconnection of these networks which guarantee all users’ ability to communicate freely and the equality of competition terms and conditions;*

*Para. 4b That no discrimination exists, under analogous circumstances, in the relationship between the operators and providers of public online electronic communication services in traffic routing and access to these services; [...]*

*15) End users’ ability to access and distribute information, and to access the applications and services of their choice [...]*”

## **II. ARCEP’s goals**

The implementation of quarterly information gathering on the technical and pricing terms governing data conveyance and interconnection is part of the work that ARCEP is performing on internet and network neutrality.

“*Interconnection*” refers to operators’ settlement of a physical and logical link between their public networks, as defined in CPCE Article L. 32, Para. 9<sup>7</sup>. “*Data conveyance*” refers to the

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<sup>6</sup> As defined in Article L. 32, Para. 1: “*An operator refers to any physical person or corporate entity operating a publicly available electronic communications network or supplying an electronic communications service to the public.*”

<sup>7</sup> Article L. 32, Para. 9: interconnection means “the physical and logical linking of public communications networks used by the same or a different undertaking in order to allow the users of one undertaking to communicate with users of the same or another undertaking, or to access services provided by another

process of a PPOCS entrusting all or a portion of its data traffic, both incoming and outgoing, to an operator. These two services overlap to some degree.

Data conveyance and interconnection services are the foundation of the internet. Unlike electronic communication network operators' other activities which are closely regulated at the national level, these services are based on partially unwritten and often little known systems. As a result, current data conveyance and interconnection schemes are both disparate and complex.

**ARCEP's aim** in introducing the process of regular information gathering described in this decision **is to deepen its knowledge of these markets**. The Authority announced plans to perform regular information gathering in Proposal No. 8 on internet and network neutrality in September 2010<sup>8</sup>.

**This information will, when necessary, help ARCEP perform its duties effectively.**

As mentioned earlier, when called upon by an operator or a PPOCS to settle a dispute – in accordance with CPCE Article L. 36-8 – ARCEP may be required to specify the technical and pricing terms contained in data conveyance and interconnection agreements. The Authority therefore needs to have a thorough knowledge of the current state of the market and of the players' business practices.

Incidentally, it should be pointed out that agreements between operators on the technical and pricing terms governing data conveyance and interconnection constitute interconnection agreements as defined by CPCE Article L. 32, Para. 9. These agreements must therefore comply with the CPCE provisions concerning interconnection, and particularly CPCE Article L. 34-8 which states that ARCEP can request information on the agreements signed by operators.

Moreover, should it ascertain the existence of serious problems that could prevent the general objectives listed in CPCE Article L. 32-1 from being achieved, and particularly those listed in the first part of this document, ARCEP could deem necessary to introduce prescriptive regulatory measures, notably by virtue of the framework defined in the first paragraph of CPCE Article L. 34-8 which stipulates that, *“to achieve the objectives defined in Article L. 32-1, the Authority can impose terms of access and interconnection, in an objective, transparent, non-discriminatory and proportionate manner: a) [...] on its own initiative, after having received the opinion of the Competition Authority, following public consultation and after having notified the European Commission and the other competent national regulatory authorities in European Union Member States; the decision is adopted under the terms of the procedure published previously by the Authority [...]”*. In addition, Paragraph 3 of Article L. 34-8 states that, *“operators that control access to end users may be subject to obligations whose purpose is to ensure the proper operation and interconnection of their networks, as well as access to services provided on other networks”*.

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undertaking. Services may be provided by the undertakings involved or other undertakings who have access to the network. Interconnection is a specific type of access implemented between public network operators”.

<sup>8</sup> Excerpt of the eighth ARCEP Proposal and guidelines on internet and network neutrality: *“To eradicate the lack of clarity that currently exists in data interconnection markets, and to obtain information that will be useful to exercising its powers, the Authority will be adopting a decision on the periodical collection of information on these markets, before the end of Q1 2011. Based in part on this information, the Authority will later assess whether it is necessary to implement more prescriptive regulatory measures in these markets”*.

These issues are also recognised by the European Council which, in its conclusions of 13 December 2011<sup>9</sup>, calls on Member States to continue to analyse the financial streams between internet companies, and underscores the importance of taking into consideration the risks that could arise from future restrictive interconnection policies<sup>10</sup>.

**This information gathering pertains specifically to the terms of data conveyance and interconnection that could have an impact on the French market;** it therefore concerns natural persons or legal entities whose activity or business is likely to have a significant impact on end users located in France (*cf.* section III).

To compare and verify the reliability of the collected information, **ARCEP plans on querying the different undertakings involved** in each data conveyance and interconnection relationship **as often as possible**. The need to obtain information from operators and PPOCS also justifies expanding ARCEP's power of enquiry and information gathering to this last category of player.

**ARCEP aims to guarantee the reasonable and proportionate nature of the efforts asked** of the natural persons or legal entities concerned by limiting the frequency of the campaigns and the number of questions asked, according to the modalities defined in this document (*cf.* sections IV and V).

Proper knowledge of the market requires accurate information, notably the list of technical and pricing terms and conditions contained in data conveyance and interconnection agreements. **ARCEP will be careful to provide a processing framework for that information that satisfies any need for trade secrecy** (*cf.* section VI).

### **III. Natural persons or legal entities concerned by this information gathering process**

The undertakings that will be required to respond to this questionnaire are those that own at least one autonomous system, generally referred to as an AS<sup>11</sup>, and which belong to at least one of the following four categories:

- a. operators declared to ARCEP in accordance with CPCE Article L. 33-1 and, more generally, operators with a public electronic communications network whose installations are located either entirely or partially in France<sup>12</sup>;
- b. operators other than those in category *a*) who have an interconnection relationship with *at least* one operator belonging to category *a*);
- c. PPOCS established in France<sup>13</sup>;
- d. PPOCS not established in France, but who have actively taken steps to have their services or content accessed by French users.

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<sup>9</sup> 3134<sup>th</sup> Transport, Telecommunications and Energy Council, concerning the open internet and Net neutrality in Europe.

<sup>10</sup> Para. 5g and 7c of the conclusions.

<sup>11</sup> An autonomous system, or AS, is a set of IP networks owned and operated by a single entity, typically an internet service provider, a transit provider or a PPOCS.

<sup>12</sup> i.e. operators required to declare themselves to ARCEP, in accordance with CPCE Article L. 33-1.

<sup>13</sup> i.e. natural persons or legal entities under French Law established in France.

On the matter of undertakings belonging to category *d*), the elements considered to be active steps taken by a PPOCS not established in France to attract French users could include, for instance:

- one or several websites that have a top-level “.fr” domain name, or any other top-level domain name that corresponds to France – such as “.re”, “.pm”, *etc.*;
- offering content in French;
- offering products and services that are shipped to or supplied in France, to a significant degree.

ARCEP is available to answer queries from any players wanting clarification on which category or categories they might belong to.

#### **IV. Nature of the information gathered**

##### **a. Scope of the relationships being considered**

The requested information concerns the data conveyance and interconnection relationship established between undertakings required to respond to the questionnaire (see above) and other autonomous systems, whether managed by that undertaking or by a third-party.

This relationship is considered to exist – i.e. to have been established – once it has materialised through a physical and logical link with another autonomous system, regardless of whether or not a written agreement stipulating the modalities exists.

Respondents can confine their answer to a limited number of relevant data conveyance or interconnection relationships, according to the modalities specified in the questionnaire in the appendix.

##### **b. Content**

For each relationship that falls under the scope of the questionnaire, respondents are asked to supply information on the characteristics of the relationship, along with traffic statistics of which a list and description can be found in the appendix to this decision.

##### **c. Proportionate nature of the information gathering**

ARCEP considers this information to be proportionate to its assigned duties in that it is necessary to tracking and measuring changes occurring in data conveyance and interconnection markets which are themselves likely to have an impact on end users in France.

The accuracy of the information supplied is crucial to enabling ARCEP to achieve a solid knowledge and understanding of these markets. ARCEP is nevertheless keen to limit the effort required of respondents by introducing a criterion regarding the reasonable size of the required response, according to the modalities listed in the questionnaire in the appendix.

The objectives listed below, and particularly verification of compliance with the principle of non-discrimination, require that not only technical but also price-related information be obtained.



## **V. Frequency of information gathering**

Information gathering campaigns will be conducted on a quarterly basis. Respondents will be given a two-month period at the end of each quarter to complete the questionnaire.

The responses must reach ARCEP by:

- 31 May for the survey covering the first quarter of the year (from 1 January to 31 March);
- 31 August for the survey covering the second quarter of the year (from 1 April to 30 June);
- 30 November for the survey covering the third quarter of the year (from 1 July to 30 September);
- 28 February of the following year for the survey covering the fourth quarter (from 1 October to 31 December).

The quarterly frequency will allow ARCEP to obtain a regularly updated view of the state of the market, and is consistent with other information gathering campaigns that ARCEP conducts with market players.

## **VI. Use made of the gathered information**

The information gathered by means of the questionnaire found in the appendix to this decision will be used by ARCEP to perform its duties, and in application of the legal framework cited in Sections I and II of this decision.

This information will be circulated in a controlled fashion within ARCEP. It will help to further ARCEP's knowledge of data conveyance and interconnection markets, and to spread this information, while being careful to respect trade secrets. It could also be used or communicated in aggregate form, notably as part of opinions submitted to the Competition Authority, notifications to the European Commission, reports to Parliament or work performed on the subject at the European level.

Moreover, in accordance with CPCE Article D. 295: "*The Electronic communications and postal regulatory authority will, upon receiving a reasoned request, provide the European Commission and national regulatory authorities in the other European Union Member States with information required by these authorities to perform their duties*". These parties may, however, only publish this information, when necessary, in aggregate form.

**It is decided that:**

**Article 1** – Undertakings that own at least one autonomous system, generally referred to as an AS, and that belong to at least one of the following four categories:

- a. operators declared to ARCEP in accordance with CPCE Article L. 33-1 and, more generally, operators with a public electronic communications network whose installations are located either entirely or partially in France;
- b. operators other than those in category *a)* who have an interconnection relationship with *at least* one operator belonging to category *a)*;
- c. providers of public online communication services (PPOCS) established in France (i.e. natural persons or legal entities under French Law established in France);
- d. PPOCS not established in France, but who have actively taken steps to have their services or content accessed by French users;

will provide ARCEP with information on the technical and pricing terms governing data conveyance and interconnection, on a quarterly basis, in accordance with the questionnaire contained in the appendix to this decision.

**Article 2** – Responses to this questionnaire must reach ARCEP within two months of the end of each quarter, beginning in the first quarter of 2012.

**Article 3** – The Director General of ARCEP is responsible for the execution of the present decision which, with the exception of the appendix, will be published in the Official Journal of the French Republic.

Paris, XXXX 2012.

Jean-Ludovic Silicani

Chairman of ARCEP

**Questions:** the stakeholders are invited to provide feedback on the relevance of the elements developed by ARCEP, in particular as concerns the following points:

1. the definition of the four categories of player concerned;
2. the nature of the information to be gathered (scope of the relationships considered, the questionnaire's content);
3. frequency of the information gathering and allowed response time;
4. any other point that players believe warrants attention.

## APPENDIX – Questionnaire on the technical and pricing terms of data conveyance and interconnection

This questionnaire is set by decision n° 2012-XXX of the Autorité de régulation des communications électroniques et des postes (ARCEP), dated XXX 2012, and forms part of its appendix.

The aim of this questionnaire is to learn the conditions of data conveyance and interconnection applicable to operators and content/application providers established in France or which activities have a significant influence on end users in France.

To this respect, and in order to confine the volume of information to be dealt with by respondents and ARCEP, contributors are invited to provide information related to a reasonable number of partner AS, as specified hereafter.

### *Generic rules, applicable to all respondents*

Contributors are invited to provide, for each AS<sup>1</sup> they own, information about each individual agreement in place with:

- **its 30 main partners**, in terms of overall capacity for data conveyance or interconnection (all points of interconnection inclusive);
- **its partners beyond the 30th**, with AS marked as "FR" or "EU"<sup>2</sup> in the RIPE database<sup>3</sup>, **provided the overall interconnection capacity with this partner is greater than, or equal to, 500 Mbps.**

*NB: an individual agreement is a formal or informal agreement, related to data conveyance or interconnection at any given site / point. Thus, an interconnection or data conveyance relationship between two parties can involve several individual agreements.*

Contributors are also invited to provide:

- their overall capacity and total (inbound/outbound) flows of data conveyance and interconnection;
- their overall capacity and total (inbound/outbound) flows of data conveyance and interconnection, **in each IXP they connect to.**

### *Specific rules, applicable to respondents that are not established in France*

Natural entities or legal persons who are not established in France are allowed to exclude from their scope of answer, upfront, a data conveyance or interconnection relationship if: it has no significant impact on end users in France *and* it involves a partner that is not established in France.

The table presented next page provides a description of information to fill-in in each column of the attached spread sheet (sheet #1).

An example of complete answer is provided in sheet #2 for reference.

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<sup>1</sup> An Autonomous System (AS) is a set of IP networks controlled by a unique entity, eg. an ISP, a transit operator or a content / application provider.

<sup>2</sup> For historical reasons, a number of AS primarily operating in France are marked as "EU" in the RIPE database (see next footnote).

<sup>3</sup> URL of the RIPE database ("Réseaux IP Européens"): <ftp://ftp.ripe.net/pub/stats/ripenncc/delegated-ripenncc-latest> => Use filters "asn" for AS and "ipv4" / "ipv6" for IP addresses.

## APPENDIX – Questionnaire on the technical and pricing terms of data conveyance and interconnection

Field	Description
N°	Please provide a number to each row of the table, i.e. to each individual agreement.
Name of AS #1 (ASN)	Enter the name of your AS and, between brackets, the corresponding reference number (ASN <sup>4</sup> ). If you own several AS, please list interconnection agreements for each of them.
Name of AS #2 (ASN)	Enter the name of the AS with whom an interconnection agreement is established and, between brackets, the corresponding reference number (ASN).
Starting date of the agreement	Provide the starting date of the agreement between parties.
Type of agreement	Point out the type of interconnection agreement signed between parties, among: <ul style="list-style-type: none"> <li>▪ Global transit [1:E] – AS #1 (the respondent) requires from AS #2 a transit service to all third party AS;</li> <li>▪ Global transit [E:1] – AS #1 provides to AS #2 a transit service to all third party AS;</li> <li>▪ Partial transit [1:n] – AS #1 requires from AS #2 a transit service to a limited number of third party AS;</li> <li>▪ Partial transit [n:1] – AS #1 provides to AS #2 a transit service to a limited number of third party AS;</li> <li>▪ Peering [1:1] – AS #1 and #2 mutually convey traffic towards their clients, their client's clients, etc.</li> </ul>
Financial terms	Point out the financial terms of the agreement, for instance: <ul style="list-style-type: none"> <li>▪ Free;</li> <li>▪ Paying;</li> <li>▪ Settlement-based (i.e. paying on threshold);</li> <li>▪ Etc.</li> </ul>
Tariff structure (and tariffs)	Explain the tariff structure in place and its components, mentioning the validity period, if applicable. Tariff structure shall include both one-off (study, install, configuration, etc.) and recurring components.
Capacity (Gbps)	Provide the capacity of the interconnection link, in Gbps (rounded to tenths).
Information about the point of interconnection [3 sub-categories]	Point out in each column, if applicable: <ul style="list-style-type: none"> <li>▪ the country where the interconnection point is located;</li> <li>▪ the city where the interconnection point is located;</li> <li>▪ in the case of a public <i>Internet Exchange Point</i>, the name of the point; otherwise, the name of the interconnection point premises' owner.</li> </ul>
<b>Flows exchanged during <i>reference quarter</i> (Gbps) – Specify your calculation approach at the last question<sup>5</sup></b>	
▪ Outbound traffic	Provide, in Gbps (rounded to tenth), the volume of data flowing from AS #1 to AS #2 during <i>reference quarter</i> .
▪ Inbound traffic	Provide, in Gbps (rounded to tenth), the volume of data flowing to AS #1 from AS #2 during <i>reference quarter</i> .
Comments	Use this column for any extra information you would like to mention (eg. the asymmetry ratio triggering payment).

<sup>4</sup> Each AS is identified by a unique number: the *Autonomous System Number* (ASN). For more information, see for instance: <http://www.ietf.org/rfc/rfc1930.txt>

<sup>5</sup> Approach suggested, but not imposed, is 95th percentile.