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AUTORITE DE REGULATION DES COMMUNICATIONS
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21 February 2012

Madame, Monsieur,

Nous vous prions de bien vouloir trouver en annexe le contribution de Cable & Wireless S.A.S. au consultation publique sur la IP Interconnection.

Nous restons à votre disposition pour toute information complémentaire.

Dr. Jutta Merkt
Directrice de service Regulation
Cable&Wireless Worldwide plc.

Cable & Wireless S.A.S. is a longstanding operator of electronic communications networks and provider of international telecommunications services in France. The operations in France are part of the network and service portfolio that is specifically designed to meet the requirements of business critical communications services for multinational enterprises, Internet Service Providers, CDN operators, application providers and other telecommunications carriers. The international activities are consolidated under Cable & Wireless Worldwide plc (in the following CWW) with registered office in the UK. The focus of CWW operations is to ensure efficient cross-border telecommunications services to the customer.

Cable & Wireless S.A.S. welcomes the opportunity to contribute to the consultation held by ARCEP on the matter of IP interconnection and data conveyance.¹ With the operation of the global IP network AS1273 CWW is delivering global IP connectivity to corporate users as well as to ISP's. With our experience of operating IP networks in Europe and outside of Europe, we believe that this submission may contribute important aspects to the discussion of IP interconnect reporting in France and we ask for its consideration by the authority.

¹ http://www.arcep.fr/uploads/tx_gspublication/consult-draftdec-uk-interco-neutralite-dec2011.pdf

1. Internet trends and IP Interconnection

Over the past 30 years the Internet has evolved as the most important communications infrastructure in the world. There are 31 billion searches on Google every month. It took the radio 38 years to reach a market audience of 50 million. The Internet reached this number in 4 years. Since Facebook was launched it took 2 years to reach 50 million online users. Whilst the technology has primarily been used for e-mail, social networking and sharing of static content we are now witnessing the emergence of 'Cloud computing' applied to all future business practice across all industries. The Facebook generation will shape this future and governments need to adapt best practise to enable this socio-economic evolution.

Internet of Things

The Internet of things combines the power of Universal network connectivity with logistics (RFID), multitude of software platforms, linked with business process leading to efficiency and productivity enhancements. The Internet of things offers new avenues for strategic alliance between ICT and non-ICT industries. It holds high potential to reach new key markets like medical systems monitoring our well being, intelligent traffic management, improved environmental monitoring, adaptive energy management, remote and mobile working that will lead to tremendous efficiency gains in many industries and help preserve our planet and meet our carbon emission objectives.

Internet of Services

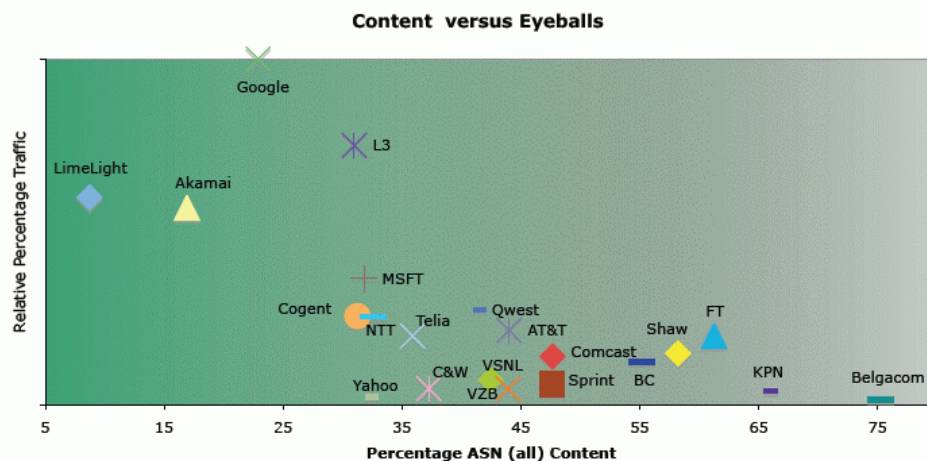
Internet of services makes use of services oriented architecture that supports the connection of various applications and sharing of data. With the Internet of services organizations can respond to changing conditions by quickly adapting their business procedures.

Internet trends – emergence of the “hyper cloud”

Historically Internet content has been distributed between +20.000 smaller ASN's typically housed by large US based Tier1's. With the emergence of 'cloud based computing' over the past 10 years a trend towards consolidation of content has moved the Internet away from distributed ad-hoc managed

enterprise server estates and 'single site' hosted content locations into the 'hyper clouds'. By mid 2009 more than 50% of Internet content was already consolidated into 150 'hyper clouds'. In light of this, one should understand the differences between the players in the IP interconnect world.

Map of Evolving Internet



*Source – NANOG47 – Arbor - Labovitz Observation report.

The graph is depicting the relative size and peering ratios of autonomous

systems, with the “hyper giants” (“content driven”) at top left, transit providers (intermediaries) with 1:1 traffic ratios in middle and large ISPs concentrating on consumer connectivity (“eyeballs”) on the far right.

2. Intervention & Proportionality

The interconnection of IP networks is currently largely unregulated. CWW is of the view that the market activities at the level of transit/peering between managed IP networks are delivering efficient results. For the time being CWW would recognize a lack of evidence of abuse of a dominant position and/or undue discrimination in this area. This observation is in contrast to the scope of the questionnaire itself as well as to the planned frequency of such a market analysis, in particular as it reaches out to the IP interconnection services of intermediaries.

Most global backbone networks will carry some traffic to and from the .fr and .eu domain(s) or have parts of the RIPE address pools marked with a .EU geo-location. As a mere conduits (in the following “intermediary IP interconnect”) between the hosting and the connectivity suppliers, it is impossible to separate the amount of traffic carried to/from source and destinations holding .fr or .eu domain(s) or IP addresses holding a .eu geo-location with the tools we have deployed on our networks today.

As a global transit network CWW does not have direct contracts with end users or hosted .fr content in France – many of our customers will host .fr content or service end users located in France. As the conduit between these networks our primary role is to remain neutral and treat traffic with an equal priority without discriminating over others. The ability to discriminate within the core would breach some contract(s) and deteriorate trust with our customers achieving compliance in one jurisdiction that might well drive a breach in other jurisdictions.

(i) Proportionality in regards to the objectives

The questionnaire is said to support ARCEP in achieving the following objectives:

- To ensure compliance with Framework Directive
- To resolve disputes between operators and content providers (CPCE Article L. 34-8)

- To impose terms of access and interconnection on own initiative (CPCE Article L. 36-8)

CWW understands that ARCEP's objectives in relation to undue discrimination and potential dispute resolution in the context of IP interconnection would be ex post interventions, if justified. This should be compared with regulatory interventions in regards to relevant markets as recommended by the European Commission.² Market definition, analysis and remedy procedures in areas that are susceptible for ex ante regulatory interventions shall be suitable and proportionate to the nature and impact of the underlying market failure. In these circumstances, the industry is used to partly in-depth qualitative and quantitative market analysis procedures that are conducted typically in a bi-annual frequency.

So far, the IP interconnection market has not been identified as being susceptible for ex ante regulation by the European Commission. In addition CWW is not aware of cases that are referred to the ARCEP or competition authorities in relation to un-due discrimination or market failure in IP interconnection. CWW is of the view that there is weak evidence for such a potential market failure and therefore scope and frequency of the proposed reporting is not justified. CWW would like to encourage ARCEP to consider an approach to the market analysis that is proportionate to the underlying issue at hand.

In absence of a particular case and in light that IP interconnection is not recommended for ex ante regulation, we suggest that a one-off market analysis that is requesting aggregated data should deliver quantitative and qualitative data being sufficient for ARCEP to comply with its duties and powers given under the CPCE.

(ii) Proportionality in regards to geographical scope

We understand that the scope of agreements that are required to be reported is driven by the notion of all "data conveyance and interconnection that could have an impact on the French market". The questionnaire therefore considers querying all IP interconnections that potentially directly or indirectly carry traffic in relation to IP addresses that are in use by users on the French territory as the main driver of determining the scope of parties that are affected by this

² Commission recommendation on relevant product and service markets within the electronic communications sector susceptible to ex ante regulation (2007/879/EC) of 17 December 2007

obligation. CWW operations of AS1273 and the underlying IP interconnection and peering relations are regional and partly global in nature. From this perspective it is not possible to single out interconnection relations that affect France only. This creates a situation of conflict for international operators between far reaching reporting obligations on one hand and strict confidentiality requirements that operators are bound to in regards to the wider geographical scope of the underlying technical and commercial agreement. CWW is of the view that this trade-off shall be resolved in light of the jurisdiction the ARCEP has for the operations in France only.

CWW proposes to avoid such a conflict of interest and potential breach of contract by limiting the scope of potential reports to those agreements that are specifically addressing the French IP address range and are exhibited on the territory of France only.

(iii) Proportionality in regards to variety of IP interconnects

As set out above, when it comes to concerns around net neutrality, traffic management and potential discrimination, we would like to confirm that intermediate IP networks have no incentive to interfere into the standard routing of IP traffic between the networks. These intermediaries are often specialized operators providing connectivity services between other IP networks. For good reasons the European Parliament and the EU Commission are referring to the “potential for anti-competitive and discriminatory behavior in traffic management, in particular by vertically integrated companies”.³ Competition between vertically integrated companies has a strong limiting effect on these incentives. Further, in absence of vertical integration, mentioned incentives and options to manage traffic in a discriminatory way do not exist. The current scope of the ARCEP recommended data collection is including these intermediate services, which is we believe currently not justified by theory and evidence.

Large transit networks are mere conduits of traffic between a large number of AS networks around the globe. These intermediary networks do not have traffic management (DPI * Deep Packet Inspection) technology deployed within the Internet core. Advanced carrier scale traffic management tools would be required to complete the requested ARCEP reports accurately driving significant cost and overhead(s). The CWW view is traffic management – to the degree

³ Resolution of the European Parliament on the open Internet and net neutrality in Europe of 7th October 2011, No. 3, <http://www.europarl.europa.eu/sides/getDoc.do?pubRef=-//EP//NONSGML+MOTION+B7-2011-0572+0+DOC+PDF+V0//EN>

required - should sit within the ISP edge and not in the core. It would be highly controversial to deploy traffic management within the Internet core and likely breach future regional network neutrality rules as these often are country specific.

In particular, we would like to encourage ARCEP to await the results of other investigations, such as the BEREC questionnaire on traffic management in IP networks.⁴ We would expect that the outcome of this questionnaire should provide an overview of different measures and techniques operators need to apply in different market circumstances. In particular we would expect evidence that non-integrated intermediary services do not apply traffic management practices that discriminate by application or by type of IP interconnection.

CWW is of the view that intermediary IP interconnection services lack incentive and market power to undue discriminate between IP packets from different parties. We encourage ARCEP to await the findings of the BEREC questionnaire, which is investigating traffic management practices in each member state. In light of this and given the fact that today's transit networks cannot separate traffic streams, CWW proposes to consider an exemption for intermediary IP interconnection services from the obligation to report.

3. Protection and Confidentiality

The mentioned agreements and related technical and commercial terms contain to a large degree business secrets. Its collection, sharing within the authority and passing on to EU Commission and other European regulatory authorities, inherently entails a risk of business secrets being leaked to third parties, even if measures to protect confidentiality are taken. CWW also has grave commercial concerns around confidentiality, disclosure and respecting the rights of other parties to prevent disclosure.

CWW would make ARCEP aware of the fact, that regular reporting requirements are expected to have a detrimental effect on renewals of existing agreements or potential new agreements that may fall under this reporting obligation.

⁴ BEREC, Questionnaire on Traffic Management, December 2011, http://ec.europa.eu/information_society/policy/ecomms/doc/current/ec_berec_tm_instructionstorespondents.pdf

4. Questions

In view of the above we would therefore summarize CWW's answers to the questions as per the following:

1. the definition of the four categories of players concerned;

For reasons of proportionality and confidentiality, we strongly suggest to limit the categories of players to those that interconnect in France and are set-up for the exchange of traffic in relation to French geo location IP address ranges only.

2. The nature of the information to be gathered (scope of the relationships considered, the questionnaire's content);

Further, due existing technical possibilities and lack of incentives for any undue discrimination we propose to exempt non-integrated intermediary IP interconnects from the reporting obligation.

3. Frequency of the information gathering and allowed response time;

For reasons of proportionality to the underlying objectives we recommend to refrain from a regular reporting schedule but rather to envisage a one-off case based data collection only.

4. any other point that players believe warrants attention.

See comments above.

End.