Analysis of the FFT Sender Party Network Pays proposal

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In the European Union (EU), representative bodies of Internet Service Providers (ISPs), such as ETNO[1], have recently reopened the debate requesting that Content and Application Providers (CAPs) pay a content levy of sorts for traffic routed to the ISPs' networks. Said ISPs have called this the "fair share" debate, arguing that the current ecosystem was unfair to them. We will hereafter describe this more pragmatically as a "Sender Party Network Pays" (SPNP) model. Their request is based on the idea that exponential growth in traffic demanded by the ISPs broadband customers leads to incremental costs for ISPs. The European Commission is considering a public consultation in the first half of 2023 on this matter.

In this context, the Fédération Française des Télécoms (FFT) has issued a note called "For a fair contribution of large bandwidth users to network financing"[2]. Our paper focuses on discussing the FFT's arguments and on showing that their proposal has been developed on fragile or debatable bases of reasoning. It details the extent to which it would lead to negative outcomes and why it would be challenging to implement on regulatory and legal points of views.

The FFT's proposal is misguided on market scope; on calculation of the levy; on compliance with Net Neutrality; on underlying data collection and analysis; and on legal basis:

- On market scope, the FFT paper does not specify which market(s) it is focusing on. Thus, there is no existing legal framework for the FFT proposal. Also, when assessing if ex-ante obligations are required, the telecom regulatory approach follows a specific process. The FFT goes about this process backwards, establishing its financial targets first and then reverse engineering the reasoning to justify them.

- The FFT does not explain how it came up with the amount it wants to collect for the French telecoms market. They offer no basis for methodological rationale. They justify their approach with faulty hypotheses to come to the amount they want. The amount targeted is out of scope of the justification and not allocated to solve the perceived issue.

- The FFT wrongly claims the measures it proposes do not contravene the Net Neutrality rules of the EU. But in practice, the implementation of the FFT proposal would prevent equal treatment between the market players, establish discrimination at multiple levels, and generate some perverse market incentives.

- The FFT does not specify how the data flows it wants to charge can be measured. The scheme proposed would potentially target all sizes of players, including European ones; it would obfuscate the fact that all

[1] European Telecommunications Network Operators' Association (ETNO)

[2] The FFT paper was leaked by online newspaper L'Informé (https://www.linforme.com/tech-telecom/article/les-quatre-operateurs-telecoms reclament-2-milliards-a-netflix-apple-et-cie_101.html) and is available for download here: https://www.documentcloud.org/documents/23259245- frenchtelecomfederation-ott-fair-share

traffic is generated by end-user requests. Finally, it would rely on inaccurate reporting that arbitrarily excludes certain players.

- The FFT wants to impose contracts on CAPs that have an unclear legal basis under EU law. The proposed scheme would necessitate a new legal and regulatory framework to be implemented, imposing a CAP financial contribution. These contracts that would prevent CAPs from adjusting their services, delivery mechanisms and the quality of experience they provide to users, have no legal basis. Also, the purpose of a regulatory measure is to solve the perceived issue over time, which the FFT's proposed contracts would instead perpetuate.

1 The FFT paper does not comply with existing regulatory procedures.

It's not clear that the FFT proposal sits within any clear regulatory frame. In the EU, telecommunication services are regulated by the telecom regulatory framework. In addition, the Digital Market Act (DMA) entered into force on November 1st, 2022, with the objective of ensuring a "level playing field" for all companies in the field of digital economy, regardless of their size. The DMA does not mention any regulation of payments from large CAPs to ISPs to contribute to network investment or network management costs[3]. The FFT proposal as it stands seems to fit neither within the telecom regulation framework, nor within the DMA.

By not defining which market it addresses, the FFT proposal ends up outside of any existing regulatory system. More specifically, when assessing if ex ante obligations are required within existing EU frameworks, the telecom regulatory approach follows a specific process in three steps:

- First, a relevant market definition needs to be identified: The European Electronic Communications Code[4] framework was rightly constructed from robust identification of markets (e.g., SSNIP test). The FFT proposal is not based on any proper market definition; in fact, the FFT never mentions which market it believes should be the subject of their regulatory proposal.

- Second, an assessment of significant market power needs to take place. The European Commission has published guidelines on market analysis[5]. Players subject to potential regulatory measures must be identified based on their market power in the European market.

- Third, the nature of the problem or the market failure needs to be identified and assessed, as emphasized by BEREC[6]. A situation where free markets fail to efficiently allocate resources needs to be demonstrated. Again, the FFT doesn't provide evidence of a market failure of any sort.

If this process identifies market failure due to the positions or actions of players with significant market power in the identified market(s), proportionate remedies can be envisaged. Furthermore, remedies are envisaged not simply to compensate certain players, but rather designed to address the issues so that in time the remedies will no longer be necessary. This is a key component of the philosophy of any regulatory approach.

[3] The DMA does propose to expand the definition of relevant markets, by considering not only monetary transactions but also data flows. This issue is under discussion at the EU level and the FFT proposal should comply with what will be decided in this matter.

[4] ECCC Directive (EU) 2018/1972 of the European Parliament and of the Council of 11 December 2018 establishing the European Electronic Communications Code (Recast)Text with EEA relevance (europa.eu)

[5] Commission Guidelines on market analysis (https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52018XC0507%2801%29); Competition: Commission seeks feedback on draft revised Market Definition Notice, 8 November 2022 (https://ec.europa.eu/commission/presscorner/detail/en/ip_22_6528)

[6] From a legal and economic point of view, there needs to be a justification for any intervention in the market, given its impact on the different players. Thus, any measure would need to be thoroughly assessed including an assessment of existing measures to mitigate a problem in the market. Moreover, from an economic point of view, such measures would have to require that the market likely fails to function properly. A relevant indication as to whether there is a need for regulatory intervention would be if there were a significant number of disputes between the different players." (p.6, https://www.berec.europa.eu/system/files/2022-10/BEREC%20BoR%20%2822%29%20137%20BEREC_preliminary-assessment-payments-CAPs-to ISPs_0.pdf)

The FFT's propositions instead go about this process backwards: the FFT starts by identifying and explicitly naming market players it would like to target. Their paper does not even attempt any definition of a market and only identifies the issue as the fact that "past and future traffic increases require a lot of investment from network operators". The targeted players are six "major content provider groups": Amazon, Apple, Google (Alphabet), Facebook (Meta), Microsoft and Netflix[7].

Thus, having neither identified the market in which the issue may reside nor defined the issue in clear and documented terms, the FFT already seems to know who they wish to extract payment from. It also does not distinguish between entities within the groups it targets, considering instead the groups as a whole, rather than the specific businesses that constitute these groups. This list of companies to be targeted as defined by the FFT suggests that irrespective of any regulatory analysis, they have already decided who they want to charge, without explaining why and how.

The FFT paper:

- Does not specify which market(s) it focuses on;
- Does not demonstrate a market failure that would justify a regulatory intervention;
- Does not justify why and how certain market actors are singled out for intervention;
- Does not explain why their proposal for an intervention would address the supposed issue.

2 The FFT doesn't explain how it comes up with the amount it wants to collect on the French market.

Unsurprisingly given that neither market, market power nor market failure have clearly been identified, the methodology offered by the FFT is designed to generate the payments they seek rather than to solve an identified market issue. The "method" proposed by the FFT in their document therefore is a justification of the amounts they request rather than a rationally established solution to a properly identified problem. More bluntly, the amount was decided upon, and then a "methodology" was designed to reach that amount.

Furthermore, it appears that the FFT has built its rationale over faulty hypotheses to come to the amount they want. The overarching reasoning relies on an assumption that Internet traffic growth will continue at a very high rate, but as has been noted by various sources and analysts, that just isn't the case. Communication Chambers has shown that growth rates for fixed line traffic have been declining since 2015 (with a glitch during the pandemic) and were below 20% in 2021[8], and that similarly mobile traffic growth rates have slowed down to below 10% in Western Europe[9].

In order to justify the amount that they suggest extracting from certain CAPs, the FFT resorts to three misguided lines of reasoning as follows:

- The FFT glosses over the current revenues it earns from CAPs in interconnection agreements: their paper assumes that CAPs do not pay for traffic at interconnection ("The purpose of this factsheet is to

[7] It should be noted that the FFT comes up with a different list of companies (Oath, Google, Meta, Amazon, and Microsoft) in its new economic paper by Arthur D. Little, with no explanation as to why nor how they selected those particular companies. (https://www.fftelecoms.org/app/uploads/2022/12/FFTelecoms-Etude-economique-2022-HD.pdf)
[8] Patterns of fixed traffic growth, 2021, Communication Chambers
[9] Ericsson, June 2022 data. https://www.ericsson.com/en/reports-and-papers/mobility-report

characterize the network costs generated by these six actors, to which they do not contribute"). This is wrong, particularly in France where certain ISPs seem to have leverage on interconnection negotiations as attested by the large share of paid peering: inbound traffic in France is 48% transit and 52% peering; and within peering, 48% is paid peering[10]. It should be noted that in the rest of the world, 99% of peering arrangements overall are settlement free and without contract[11]. The methodology described by the FFT is thus based on the quantity of incoming traffic flows to ISPs' networks, most of which are already paid by the CAPs.

- In fact, the FFT uses a figure to justify this, i.e. that 55% of inbound traffic originates from the six players cited. This figure is not directly sourced and is expressed as a percentage of overall traffic which the FFT itself admits isn't a relevant figure since only peak traffic is used to dimension network capacity and is proposed to be used in their charging methodology.

- The FFT very crudely attempts to justify the amount that they would like to collect: The FFT's rationale appears to "retrofit" a basic methodology to a desire to generate new revenues from traffic routing, without any bottom-up analysis of costs, efficiency, or incentives. They mention an upcoming analysis "if necessary", which suggests that these amounts are announced without any underlying comprehensive economic analysis. Furthermore, by arbitrarily determining an amount that they deem justified, the ISPs represented by the FFT in fact demonstrate that they are able to abuse their position on a market where their existing broadband clients are captive customers (for the duration of their subscription, and accounting for provider switching costs).

- If content and application providers want to deliver the services requested by these customers, they either have to negotiate their interconnection with the ISPs, which is already what is happening and explains why a significant amount of existing inbound traffic is already paid for; or they pay third parties such as transit providers and CDNs to deliver traffic on their behalf. ISPs cannot simply state an amount as "costs": they would need to justify that amount by being transparent about their own cost structure for traffic distribution and interconnection, and – assuming regulators accepted the premise that there is some sort of market failure – agree to ongoing regulatory scrutiny of their access, aggregation, and interconnection network costs.

- The FFT mischaracterizes the role of ISPs in the ecosystem and more broadly how the Internet ecosystem works: To support their argument, the FFT describes ISPs as being exclusively connectivity providers to third-party content and application providers. In fact, Internet service providers are also themselves significant content and application providers, at least to their own broadband customers and in many cases also more broadly, for example by providing TV and video-on-demand services. This means that the cost of handling traffic at peak times in their own networks cannot be passed on to CAPs as if the ISPs didn't distribute their own content concurrently to their broadband subscribers.

- More fundamentally, they ignore the fact that telcos are paid, by users, to provide Internet access service. Users only pay ISPs because they want to access content and services, including those provided by the CAPs targeted by the FFT's proposal. If there is to be a "fair share" (sic) of the telco's costs of providing a service to users, there should also be a "fair share" of the telco's revenues attributed to the CAPs in return for their provision of content and services to requesting broadband customers.

Lastly, the amount targeted is not in line with their justification of its purpose, and not allocated to solve the perceived issue. The order of magnitude of the amount mentioned seems out of scope with network and traffic management costs. The FFT report indeed assesses that "the financial objective of the proposed measure should be equal to the incremental costs generated by these actors (editor's note: i.e., the 6 CAPs listed), i.e., a target of

[10] L'état d'Internet en France, Rapport d'activités, ARCEP, Juin 2022, available on : https://www.arcep.fr/uploads/tx_gspublication/rapport-etat internet-2022-300622.pdf

[11] https://www.pch.net/resources/Papers/peering-survey/PCH-Peering-Survey-2016/PCH-Peering-Survey-2016.pdf

nearly "€1.5 billion on mobile and €500 million on fixed". According to French regulator ARCEP[12], over the last 7 years, French ISPs have invested on average 5,16 billion EUR per year in access networks. The amount that they are requesting is therefore over one third of their own CAPEX spending, significantly more than only incremental network and traffic management costs.

Considering – as stressed above – that their networks are built for far more than just carrying CAP traffic (voice services, their own contents and applications, etc.), and also that operator CAPEX is designed to last a generation or more (in the case of FTTH investment), this number seems absurd.

It should furthermore be stressed that network and traffic management costs are relatively well known and have been documented. For example, the annual cost of handling Netflix traffic in the UK in 2021 (about 15% of peak usage capacity) has been calculated at 0.5% of total network costs[13]. On that basis, the amount that could reasonably be considered network management cost in France would be around 26m EUR, and even in 2021 when infrastructure investment was higher than average at an estimated 8,3bn EUR, the cost of handling traffic would be only around 42m EUR.

In their proposal, the FFT does not commit to reinvesting these sums in infrastructure deployment or improvement anyway. The likelihood is that should such an SPNP system be put in place and in the absence of a strong governance framework, the dividends of the shareholders of the ISPs would suddenly increase, showing where the windfall revenue would truly go.

The FFT doesn't explain how it comes up with the amount it wants to collect on the French market.

- The FFT offers no basis for methodological rationale.
- The FFT builds its reasoning over faulty hypotheses to come to an amount they want.
- The amount targeted is out of scope of the justification and not allocated to solve the perceived issue.

3 The FFT wrongly claims the measures it proposes do not contravene the Net Neutrality rules of the EU.

In 2018, ARCEP explained that "Net Neutrality contributes to this new ambition which is to make the Internet a "common good"[14] before stating that "in France, investments in networks have never been as high as since 2015, the date of adoption of the regulation on Net Neutrality"[15]. For the regulator, clearly, Net Neutrality and investment in infrastructure are not at odds, which is probably why the FFT paper tries so hard to suggest that their scheme would not contravene Net Neutrality rules.

In fact, the SPNP proposed by the FFT would not only prevent equal treatment between stakeholders, but it would also establish discrimination at multiple levels as well as entail some perverse market incentives.

[12] Les services de communications électroniques en France, ARCEP, Déc 2022, page 17, available on : https://www.arcep.fr/fileadmin/cru 1671101953/reprise/observatoire/march-an2021/obs-marches-annee-2021-definitif_dec2022.pdf
[13] Netflix's Open Connect program and codec optimisation helped ISPs save over USD 1 billion globally in 2021, Analysys Mason, 14 July 2022; "The marginal costs of delivering Netflix content represent around 0.5% of total network costs, despite Netflix usage representing about 15% of peak usage in the UK."
[14] ARCEP, Tout comprendre des débats autour de la Neutralité du Net, Infographie, 2018
[15] Ditto

The EC Open Internet Regulation (OIR) aims to safeguard equal and non-discriminatory treatment of traffic in the provision of Internet access services and related end-user rights. It should be noted that CAPs are considered "end-users" under the regulations. Under the current Net Neutrality framework, there is no express prohibition on ISPs charging CAPs for carrying their traffic as part of an Internet access service. However, this is established on the basis of commercial negotiations, not regulatory obligations. But Article 3.1 of the EU Open Internet Regulation clearly stipulates that end-users – such as CAPs – "shall have the right to access and distribute information and content [...]" and this "without discrimination" as clarified by OIR recital 6.

It is also important to reiterate that consumers (subscribers to telecoms services) are the demand drivers as they are the stakeholder category asking for access to content. In the context described above, French ISPs can increase retail prices to cover their marginal traffic costs and in fact, are doing so. French regulator ARCEP showed that in 2021, fixed communication services prices increased by 5.1%[16].

A Sender Party Network Pays (SPNP) scheme is discriminatory by essence.

The FFT proposal would allow ISPs to directly distort competition. CAPs indeed need to be able to access ISPs' customers to distribute their content, which puts ISPs in a position of market power over CAPs and with an ability to distort competition in CAPs markets. The current open Internet rules are designed to prevent ISPs exerting control over the content that their end-users can access – e.g., by discriminating against a particular CAP's traffic. In the EU Open Internet Regulation[17] indeed, Articles 3(1) and 3(3) currently limit the ability of ISPs to require CAPs to pay them through "pay to play" mechanisms, by giving end-users the right to access information and content of their choice and preventing ISPs from blocking, degrading or prioritising access to an individual CAP's content in a discriminatory way or based on commercial considerations. The Regulations do not prevent commercially negotiated payment for network interconnection.

It must be noted that the EU has yet to consult on the related issue of whether large digital platforms should contribute to the costs of Europe's telecoms networks. The matter of equal treatment of market players will be better discussed as part of that Consultation[18] in 2023.

In addition to the lack of equal treatment between ISPs and CAPs, the SPNP proposal would establish discrimination on different levels in the market:

- The fact traffic below the threshold would not be charged would in itself constitute discrimination. However discrimination is more likely to happen between those whose traffic can be measured (direct interconnection and first party Content Delivery Networks) and those whose traffic is carried by others (transit, third-party Content Delivery Networks etc.).

- Large CAPs have invested to build their own infrastructure of interconnect and CDN delivery, which can make it easier to identify their traffic. However, in the absence of any clearly determined threshold in its proposal, the FFT falls back on targeting the "top 5" networks (traffic wise). There is no rationale for doing that, and no clarity as to which data points can be collected and relied upon in order to determine whether a company is listed as in the top 5 or not, as detailed in the next section.

- Those CAPs who rely on transit providers or third-party Content Delivery Networks may be able to avoid having their traffic identified by being aggregated with other providers. It is notable that both the FFT paper and the ETNO/Axon paper on which it is based do not refer at any point to third-party CDNs such as Akamai and Cloudflare, even though they are some of the largest distributors of content on the Internet. It looks like the FFT has targeted large players with transparent traffic information it thinks it

[16] Indices des prix des services fixes et mobiles, ARCEP, 24 mai 2022, https://www.arcep.fr/cartes-et-donnees/nos-publications-chiffrees/marches-des communications-electroniques-en-france-enquetes-trimestrielles-et-annuelles/indice-des-prix-des-services-fixes-et-mobiles.html
[17] https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX%3A32015R2120
[18] https://www.reuters.com/technology/eu-consult-big-tech-contribution-telco-networks-by-end-q1-2023-2022-09-09/

can measure, and not targeted large players with opaque traffic information it can't measure, another form of discrimination.

- Small players who rely on cloud-based distribution infrastructure will be discriminated against. For instance, the French Doctolib healthcare service is hosted on AWS[19] (Amazon Web Services). Traffic would be identified as originating from AWS, but nothing prevents AWS from passing on the SPNP levy costs to Doctolib. This will increase costs for small content providers using cloud-based services. It should be noted that another of the EC's Digital Decade targets concerns increasing SMEs use of cloud services - a fee on traffic delivered from cloud providers would be a direct disincentive for this.

- The levy will also indirectly impact large non-digital businesses who rely on third-party digital infrastructure services (Carrefour is a Google cloud client, EDF and Veolia use AWS services[20], etc.).

- The FFT paper offers no solution to the problem of disambiguating traffic from third-party CDNs, or from cloud providers, other than suggesting that CAPs should (be forced to?) disclose their traffic volumes in the direction of specific ISPs. How this should work across borders and jurisdictions is not clear. There are also practical challenges for smaller CAPs in identifying exact traffic volumes through third parties which could make compiling this information challenging. (See below)

- Another questionable point about discrimination relates to the fact that ISPs are not themselves traffic routing networks: they deliver services (voice, content, home automation…) to their customers on the same broadband lines used to route CAP traffic to the same users. Because their own content would not be subject to SPNP rules, it would effectively be discriminated for positively, hence further discrimination against other CAPs.

SPNP scheme creates negative outcomes for the ecosystem.

The FFT proposal, by allowing ISPs to charge an SPNP-type contribution, would generate pernicious effects on the market. It would indeed cause harm to all CAPs, not just the five companies targeted - in particular smaller or non-commercial CAPs, and to investment and innovation. Given the potential market power of ISPs that has been described in the section above, ISPs engaging in discriminatory behaviour could negatively impact these CAPs and limit funds available for investment and innovation in content and services.

It is also important to underline that the SPNP scheme would lead to a set of perverse incentives to route traffic differently.

- First, it would foster a misuse of network capacity by ISPs. To increase SPNP revenues, ISPs might be encouraged to develop scarcity in network capacity or develop network capacities in non-cost-efficient ways, so that they could charge CAPs for carrying traffic, or charge them more.

- The threshold system itself would create perverse incentives to disaggregate traffic inefficiently. In order to not reach the critical level of threshold and thus be charged, a number of content providers would be inclined to not accept content from third-party players into their network, leading to disaggregation of Internet traffic. Similarly the threshold system could encourage use of non-traditional delivery mechanisms such as peer to peer, which it appears would not be charged but could create problems on ISPs access networks.

- Finally, an SPNP system risks disincentivising delivery of content and hence innovation. South Korea (SK) is the main country having implemented such an interconnection contribution. Content providers have

[19] https://www.latribune.fr/technos-medias/innovation-et-start-up/comment-doctolib-justifie-le-choix-du-geant-americain-amazon-pour-heberger les-donnees-des-francais-919359.html
[20] https://awsfrance.publicfirst.co/?lang=en

to pay ISPs for network usage as ISPs argue that traffic surge causes costs increase. Following the implementation of the "Network free ride prevention act", quality degradation has been noticed on the end-users' side[21], leading to consumer associations protesting against the law. This has also led to content providers moving their hosting capability outside of SK (in Japan or China) creating inefficiencies and additional costs for the entire ecosystem[22].

The FFT wrongly claims the measures it proposes do not contravene the Net Neutrality rules of the EU.

The SPNP proposed by the FFT would:

- prevent equal treatment between the market players,
- establish discrimination at multiple levels, and
- generate perverse market incentives.

4 The FFT does not specify how the data flows it wants to charge can be measured.

The FFT itself admits that ISPs have no idea of the share of traffic represented by each CAP[23]. This is not surprising: In any data flow that is carried across multiple networks, the information provided by packets of data does not in itself identify the origin CAP nor the path the data has taken to this point in the network. If traffic is routed directly from a CAP network to an ISP network, this allows to identify the source. However, a large portion of Internet traffic is not routed in this way and rather embedded into larger traffic flows:

- If a service is hosted on a cloud platform, the packets would carry the identity of the cloud platform, not the service.
- If a piece of content is served via a Content Delivery Network (CDN), it would carry the identity of the CDN.
- If services or content are delivered in aggregate via an IP transit provider, it must be decided if the origin network or the previously routed network should be charged.

As a consequence, a significant portion of traffic delivered to ISP networks cannot be easily linked to its original source. In order to change this, technical standards for the Internet would have to be altered. This would have to be done at IETF (Internet Engineering Task Force) level and would have to be implemented by all network operators globally. Unless ISP representatives make the case to the IETF and such rule changes are agreed, this is an unlikely perspective.

[21] Euroconsumers' Webinar "Network access fees: fair share or the end of the open internet? 23 November 2022, Youkyoung Huh (Consumers Korea)
[22] German regulator BNetzA has documented this in an in-depth case study (in https://www.bundesnetzagentur.de/EN/Areas/Telecommunications/Companies/Digitisation/Peering/download.pdf?__blob=publicationFile&v=1, p. 53).
[23] « At present, it is impossible for the operator to accurately allocate the volume of incoming traffic to each provider of content, applications, or services […] »

Previous approaches developed by ISPs such as Deep Packet Inspection (DPI) are also more and more redundant due to the increasing use of encryption of CAP services for security and privacy reasons. In any case, DPI is explicitly forbidden as per EU Net Neutrality Regulations Article 3(3)[24].

The FFT's proposal would target content providers of all sizes.

Since the FFT's proposal requires accurate measurements of traffic volumes by origin, it would disproportionately target cloud platforms and CDNs. Furthermore any CAP embedded on platforms that passed the threshold would be charged as well, because the larger hosting platform would be charged. In other words, while the FFT's plan apparently only targets large content providers, in actual fact it targets a much wider range of content providers. And since small content providers are more likely to use third-party cloud and CDN platforms, smaller CAPs would in fact be disproportionately likely to be charged.

Finally, as mentioned above in Section 1, the FFT's proposal is framed in a way as to target large groups as opposed to individual companies. This would result in an aggregation of traffic volumes from a number of different content and application providers that would therefore be more likely to collectively pass the FFT's threshold, whereas individual companies within a same group would not. Again, small content providers who belong to large Internet companies would be targeted despite their small size.

The FFT misrepresents traffic and network load in its proposal.

There are two important aspects to keep in mind when examining traffic flows:

- First, all traffic requests originate from end-users. CAPs do not force feed traffic to end-users, they only respond to a request for content or services by end-users. There may be some grey areas as to whether users "request" traffic for example around advertising delivered alongside content requested, or auto play features, but ultimately these are part of the content being delivered, or features controllable by users.

- Second, interconnection links are not directional. They have a certain capacity to handle both incoming and outgoing traffic.

Yet the FFT's proposal not only suggests that traffic is sent by the CAPs to the end-users while ignoring the fact that the traffic exists because of requests originating from their customers in their own networks – but also considers only incoming traffic as relevant to the telcos' levy needs. They furthermore arbitrarily decide that only traffic between 8:00pm and 10:00pm should be accounted for without justifying this timeframe with any relevant data.

Fundamentally, CAPs are servicing the requests from telecom operator customers and responding to those requests with the content that these same customers are requesting.

The FFT's scheme could only be based on stakeholders reporting.

Since accurate measurement of traffic flows is impossible, only reporting by stakeholders can determine if traffic thresholds have been reached. Since all traffic would need to be monitored (not just incoming traffic onto ISP networks), this reporting would have to be done by both CAPs and ISPs under the same conditions. Any such

[24] EU Net Neutrality Regulation specifies that reasonable traffic management measures must be transparent, non-discriminatory, proportionate and not based on commercial considerations. There must be "objectively different technical quality of service requirements of specific categories of traffic". Article 3(3) of the Regulation mentions that while ISPs can implement such measures, they "shall not monitor the specific content and shall not be maintained for longer than necessary."

reporting would need to be supervised and reconciled by some regulatory agency (to be determined, since the FFT does not specify which market or regulatory body this would come under).

This, however, would likely not solve the issue of misrepresentation of embedded traffic. Cloud providers in particular can likely not reveal how much traffic their customers represent as this would be a breach of contractual confidentiality. Competition law prohibits the exchange of competitively sensitive information between actual/potential competitors. An assessment of the impact of the proposed data collection would therefore be needed to identify if it could potentially result in an anti-competitive harming of competition, innovation, and consumers (see Section 5 below).

Another potential issue relates to the exclusion of Content Delivery Networks from the new fee by the FFT[25]. This includes Amazon CloudFront, Google Cloud CDN, Azure CDN (Microsoft) and Netflix Open Connect, which are all services delivered by companies explicitly targeted by the FFT. These CDN services host third-party content, leading to the same problem described earlier of smaller CAPs being charged.

It also leads to the anomalous situation where traffic from the large CAPs targeted that is delivered through third-party CDNs would not be charged.

This provision leads to a number of questions: Should the traffic from these services be excluded from traffic flow calculations? If yes, how to distinguish the traffic from these services from the overall traffic from the same companies? In its cursory unpublished calculations, has the FFT excluded traffic from said CDNs?

The FFT model for measurement of traffic flows is based on flawed assumptions.

The SPNP proposed by the FFT would:

- potentially target all sizes of players, including European ones,
- disregard the traffic that seems more directly generated by end-users, and
- rely on inaccurate reporting that arbitrarily excludes certain players.

5 The FFT wants to impose contracts on CAPs that have an unclear legal basis under EU law.

From a legal point of view, it is unclear under which EU or French law basis the implementation of an SPNP scheme in France (and more largely in the EU) would sit. The FFT has not articulated on which legal and regulatory basis they are seeking to rely on to justify their proposed intervention in commercial contract arrangements between CAPs and ISPs. As such arrangements are already subject to the constraints of competition law and existing Net Neutrality rules, which do not go as far as what the FFT proposes, it is important that this is clarified.

In the absence of mandated legal and regulatory measures, freedom of contract between the parties should prevail. In their proposal, the FFT advocates the implementation of an SPNP scheme, and propose to prevent CAPs from making any changes to their delivery architecture in response to the proposed levy. This approach is inappropriate as under normal market conditions (under which providers should be independently competing

[25] "It should be noted that content providers below this threshold as well as content delivery networks would thus be outside the scope of application of the contribution, which targets only the largest content providers responsible for the majority of traffic." (in Factsheet 3, Section 1)

and entering private commercial negotiations freely), market players would not have the ability to unilaterally impose or mandate new contract conditions. ISPs and CAPs should be free to negotiate fees payable on a commercial basis and to set up the delivery architecture as they choose (and adjust the Quality of Experience requirements according to their business needs).

Regulatory principles dictate that a regulatory measure is not just designed to address an immediate issue but also to solve that issue over time, as appropriate. By forcing CAPs not to alter their delivery architecture (and related Quality of Experience), ISPs would be acting contrary to general regulatory principles: CAPs would not be able to adjust their service delivery, therefore the issue as perceived by the FFT would be guaranteed to prevail over time.

Also, as stated in Section 1, regulatory intervention must be warranted. A finding of market power and/or regulatory failing is key. Also, if an obligation imposed on a business with significant market power is justified, it must be appropriate and proportionate to the nature of the problem identified on the wholesale market in question and on the related retail market (if problems arise there, such as potential harm to consumers in the form of higher prices, less competitive offerings, poor service quality, etc.). Regulatory practice is concerned with proportionality, the notion that a remedy needs not only to fix the issue identified but do so in a way that is commensurate with the importance of the issue. Considering the wide-ranging implications on the Internet ecosystem that the FFT's proposal would have, there is a very real case to be made that the mechanism proposed by the FFT is in no way proportionate to the perceived issue with the French ISPs it represents.

The FFT proposal is also of concern as it is at direct variance with the existing Net Neutrality principles which were a regulatory response to a risk of abuse by the network players, as demonstrated by a number of cases of Net Neutrality breaches[26]. Another element to consider is that a market review process (examining whether obligations should be imposed on undertakings designated as having significant market power) might better allow regulators to consider the impact on competitive conditions of new developments (e.g., newly concluded voluntary agreements between undertakings such as access and co-investment agreements). Furthermore, the relevant market is likely to be dynamic as the technological evolution and end-user demand patterns could evolve. Any market analysis and regulatory proposal should consider and take account of this, so the market can work in both the short- and medium-terms.

Finally, legal terms for the SPNP implementation would also need to have a clear legal basis and scope, be proportionate, consider the possibility that a player does not agree to pay a contribution and provide for remedies.

[26] See footnotes 4 to 8 for examples: https://www.laquadrature.net/en/time-for-eu-wide-net-neutrality-regulation-0/

The SPNP scheme would necessitate a new legal and regulatory framework to be implemented, as it does not seem to be envisaged as such under current frameworks.

- The legal basis for regulatory intervention is unclear.
- Imposing a CAP financial contribution without CAPs being able to adjust their delivery networks and the QoS they provide has no legal basis.
- A regulatory measure is not just designed to address an immediate issue but also to solve that issue over time, as appropriate. The FFT proposal appears to be a remedy that would be permanently necessary.
- Regulatory intervention must also be warranted – with measures designed to address evidence of a specific harm and be proportionate to the harm in question. As stated by BEREC, there is no evidence for a SPNP model as proposed by FFT.[27]

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[27] Page.14 https://www.berec.europa.eu/system/files/2022-10/BEREC%20BoR%20%2822%29%20137%20BEREC_preliminary-assessment-payments-CAPs-to-ISPs_0.pdf