

# DOT Europe response to the Exploratory Consultation on the future of the electronic communications sector and its infrastructure

#### Introduction

DOT Europe welcomes the opportunity to contribute to the European Commission exploratory consultation on the future of the electronic communications sector and its infrastructure. Our members remain committed to supporting Europe's Digital Decade efforts and want to play their part in supporting Europe's digital transformation. Connectivity targets are of critical importance in this regard, and we appreciate that the European Commission is taking a holistic approach to achieve them.

That said, we also believe that the questions posed in this consultation are not based on a solid premise. Rather than focusing on investigating the rationale and need for a regulatory intervention, many questions seem to draw certain assumptions:

- that there are investment gaps in network infrastructure;
- that the volume of data flows can only grow exponentially; and
- that this comes with increased costs, rather than opportunities for network infrastructure owners.

These are not facts but issues that need to be further verified/ascertained by policy makers.

Crucially, the consultation does not seek to identify whether there is a need for the introduction of a network fee; nor does it examine what kind of market failure, if any, such an initiative would address. Instead, stakeholders are asked whether they support such a measure, what possible negative outcomes it may have, and how these can be mitigated. It would appear that the discussion on network fees is a solution looking for a problem. As a next step, the Commission should carry out a more fulsome evidence gathering process in order to fully scope the problem and inform evidence-based policy-making.

The consultation also appears to ask questions which will have limited usefulness. For example, asking for investment figures on network infrastructure by different stakeholders obscures the fact that network operators would always invest more, since they own and profit from the networks. Investment by non-telecom operators would not be comparable, as each business sector invests primarily in areas it controls and benefits the most from. Simply put, telecoms operators are in the business of creating connectivity; content and application providers primarily create content, although the latter understand the importance of connectivity, which is why they also invest in infrastructure. Investment data gathered by this exercise will present an incomplete picture of the investment landscape; while only showing that different market players are active in different sectors.

In addition, the consultation does little to explore the contributions of technology companies in increasing demand for connectivity, and the benefits this has provided for telecom operators. Without the growth of the digital economy, there would not necessarily be significant demand for broadband connectivity. The two sectors are mutually beneficial.

DOT Europe would like to take this opportunity to showcase that there is no compelling evidence to support the introduction of a network fee; and elaborate on the negative effects such a move would



have for a range of actors: consumers, businesses (directly and indirectly), as well as the smooth functioning of the Internet itself.

We will also demonstrate that developments in the electronic communications sector are often erroneously portrayed as risks for the telecoms sector, when in reality they can present greater commercial opportunities for streams. The paper has the following structure:

- I. Challenge the notion that traffic evolution is preventing telcos from investing in infrastructure.
- II. Show the lack of supporting evidence that traffic growth puts strain on existing networks.
- III. Elaborate on the adverse impact of a network fee on businesses, consumers, the wider internet ecosystem, and EU policy objectives.
- IV. Cover the technical and implementation challenges of a network fee.
- V. Conclude by showing that changes in the electronic communication sector present an opportunity.
- VI. Next steps after the exploratory consultation

The consultation on the future of the electronic communications sector should be taken as an opportunity to discuss public goods, services and infrastructure; not as a means to justify taking money from on private sector actor to pay another.

As for the basic premise of introducing network fees more broadly, there are numerous arguments why this is by no means neither justified nor worth the disproportionate adverse results it will inevitably cause. We maintain that the presumed need for network fees in support of network investment is not backed by any evidence; that introducing network fees will have a negative impact on consumers, businesses and contradict EU policy objectives; and that such a measure presents serious technical and legal challenges.

## I. No evidence that traffic evolution is preventing telcos from investing in their infrastructure

There is no evidence to suggest a link between increases in telecoms network traffic and investment in network infrastructure. If anything, Fiber to the home (FTTH) coverage in the EU was higher than the US or OECD average in 2021,<sup>1</sup> with significant variations between EU Member States, with some reaching peaks of 75% FTTH and others below 10%.<sup>2</sup> This suggests that the policy levers to achieve next generation rollout already exist. There are huge amounts of funding being invested into FTTH networks across Europe, not only by incumbent operators, but also by competitive fibre providers, infrastructure funds, pension funds, and more. A report by Visionary Analytics for the EC<sup>3</sup> found that "FTTH appears today to investors as the most attractive "risk-return" profile in digital infrastructure, still at an attractive price".

Fibre roll-out appears in practice to be a good business with guaranteed return on investment. This is illustrated by the fact that new specialized fibre deployment operators pop up. Reports by the FttH Council<sup>4</sup> also show that in France, in the early years of the development of the fibre concession model, local authorities typically provided significant amounts of public funding to concession holders, whereas this has not been necessary after 2019 due to the strong competition from well-established competitors, leading to zero subsidies in practice.

<sup>&</sup>lt;sup>1</sup> ETNO, The State of Digital Communications 2022

<sup>&</sup>lt;sup>2</sup> OECD Broadband Statistics

<sup>&</sup>lt;sup>3</sup> Visionary Analytics

<sup>&</sup>lt;sup>4</sup> FttH Council report on fibre business models



Taking all these points into account, as well as the fact that telecoms operators are being paid by consumers who use their services to, among other things, invest in network infrastructure, we can reasonably expect that investment by telecoms operators will largely go ahead in most profitable areas, with some exceptions for very remote or rural areas, where the return on investment may not be as attractive. However, these areas only make up a very small part of the total EU population and there are both alternative ways to fund the roll-out of high-speed networks (including EU funds) in these areas; and alternative solutions such as the roll-out of 5G coverage and satellite.

In addition, it has to be noted that ISPs are already being paid by consumers for using their services. Part of this fee is also used to fund infrastructure investments.

## EU and local funding is already available for network roll-out

Meeting Europe's connectivity targets also depends on looking at measures that have been agreed on but not implemented yet and addressing the delays. The amount of public funds in broadband networks in the Recovery and Resilience Facility (RRF) is €33.54bn (grants + loans) and under €2bn for CEF2. However, as of March 2022 only around 15% of total funding across Member States' RRPs have been disbursed. <sup>5</sup> These public funds could contribute to achieving the Digital Decade, the national broadband targets and act as a catalyst to attract further private investment.

# CAPs already invest in infrastructure

In addition to the substantial investment in network infrastructure already underway by the entirety of the internet ecosystem, DOT Europe highlights the significant investment made by large Content and Application Providers (CAPs) in network infrastructure. Specifically, these CAPs invest in hosting (data centres), transport (submarine and terrestrial cables) and delivery (peerage and caching), investing globally \$883 billion over the period 2011-21.6 This contradicts the suggestion that the largest CAPs are "free riding" (benefitting from the network without contributing to it). Indeed, in the preliminary assessment by BEREC, regulators draw the conclusion that there is "no evidence of free-riding". These investments from CAPs reduce the need for ISPs to invest to deliver traffic demanded by users - saving ISPs more than \$5bn per year. 8

Moreover, the internet is an ecosystem where investments made in infrastructure are complemented by CAPs' significant investments in content creation, which drives demand for connectivity services to the benefit of telecom operators. CAPs also spend significant amounts improving encoding and video compression to deliver high quality content without using unnecessary bandwidth. This saves telcos a significant amount of money. *One indicative example comes from a recent Analysys Mason report estimates that Netflix's codec optimisation helped ISPs save over \$1bn globally in 2021.* 

## II. No evidence that current traffic growth puts strain in existing networks

The consultation seeks views on future developments in data traffic growth and on issues such as data transmitted through the networks, as well as benefits brought by compression algorithms. This approach does not recognise the fact that network traffic is driven by consumer demand (if anything, it seems to assert that traffic is generated by CAPs); that current networks are able to deal

<sup>&</sup>lt;sup>5</sup> Bruegel Dataset, 25 March 2022

<sup>&</sup>lt;sup>6</sup> The impact of tech companies' network investment on the economics of broadband ISPs, Analysys Mason, October 2022

<sup>&</sup>lt;sup>7</sup> BEREC 2022

<sup>&</sup>lt;sup>8</sup> Analysys Mason



with existing traffic volumes (and still have significant capacity); and that network costs are traffic-insensitive.

Consumer demand for Internet traffic is the major reason for telco revenue growth

Telecom operators' revenues have not declined due to traffic growth. On the contrary, the internet access business is the most sustainable of their services. As shown in the GSMA reports, internet access revenues have grown 11% over the past years. It is mainly the voice calling business which is in decline. <sup>9</sup>

In addition, the debate around the concept of "large traffic generators" obscures the fact that demand for traffic is consumer-led. CAPs transmit data through networks in response to consumer requests. The same is true for software updates and ads; they are part and parcel of traffic requested by consumers.

Current networks are able to deal with internet traffic

There is no evidence to suggest that existing network infrastructure is at capacity. If anything, constant investment, not least by large CAPs, as well as tier 1 infrastructure providers, is increasing capacity, while technologies such as data compression algorithms increase efficiency and ease pressure, even when there are increases in data volumes. This combination of ongoing investment and technological advances in data traffic management need to be factored in before any legislation is rushed through.

All of the stay-at-home activity associated with COVID-19 at the start of the pandemic resulted in a spike in traffic from 2019-2020. As expected, the return to more normal usage patterns resulted in a substantial slowdown in the annual growth rate. Average traffic growth dropped from 48% between 2019-2020 to 23% between 2020-2021, while peak traffic growth dropped from 46% to 26% over the same time period.<sup>10</sup>

The assumption of steady Internet traffic growth is not proven. 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<sup>11</sup>, and that similarly mobile traffic growth rates have slowed down to below 10% in Western Europe<sup>12</sup>; in some cases internet data traffic has even decreased.<sup>13</sup>

It also needs to be noted that not all traffic flows are simultaneous (peak / off-peak).

Many network costs are traffic-insensitive

The cost of IP interconnection equipment decreases overall and IP interconnection cost is only marginally influenced by capacity. <sup>14</sup> Fiber costs are equally traffic insensitive. Indeed, costs for these networks increase based on the number of lines and not on the amount of traffic going through them.

Adopting an approach that draws a linkage between network traffic and cost is erroneous and does not provide an accurate picture of what drives traffic and where the costs in network infrastructure lie.

<sup>&</sup>lt;sup>9</sup> GSMA | The Internet Value Chain 2022 | Public Policy

<sup>&</sup>lt;sup>10</sup> Global Internet Traffic and Capacity Return to Regularly Scheduled Programming (telegeography.com)

<sup>&</sup>lt;sup>11</sup> Patterns of fixed traffic growth, Communication Chambers, 2021

<sup>&</sup>lt;sup>12</sup> Ericsson, June 2022 data

<sup>&</sup>lt;sup>13</sup> Plum Consulting, Analysis of the FFT Sender Party Network Pays Proposal, January 2023

<sup>&</sup>lt;sup>14</sup> Competitive conditions on transit and peering markets, WIK Consult, February 2022



## III. Impact of a network fee on consumers, businesses and EU policy objectives

The European Commission consultation is seeking views on a mandatory mechanism of direct payments by so-called "large traffic generators" to finance network deployment. Such a move will have negative repercussions for a wide range of stakeholders.

#### Adverse impact on consumers

South Korea is the only country that has introduced a Sending Party Network Pays model for internet traffic. It is clear<sup>15</sup> that this policy weakened competition and increased the cost of connectivity. Moreover, domestic and smaller, competing CAPs and other infrastructure providers were forced out of the market, while larger international CAPs are no longer investing in submarine cable projects connecting Korea. Other analysts note it will result in higher costs for consumers and higher latency, as it could lead to Korean CAPs sending their content to Korean users from other jurisdictions.<sup>16</sup> What has been observed so far is:

- Sudden and significant increase in cost of traffic delivery
- Market exit for smaller CAPs unable to bear this cost
- Less choice for content consumers
- Higher latency as CAPs route their traffic inefficiently "the long way around" to optimise costs
- The potential of less telecoms market competition; The existing model where CAPs are incentivised to compete on quality of content and ISPs on quality of networks would be disrupted by the introduction of network charges.<sup>17</sup> Bigger ISPs would be strengthened visavis smaller ISPs, thereby undermining a significant benefit of the EU telecoms single market, namely a competitive telecoms market. The bigger ISPs would have less incentive to innovate and develop their networks,<sup>18</sup> the net result being less ISP choice, higher prices and reduced quality of broadband.
- Market exit of alternative network providers, such as CDNs.
- Further collateral impacts, in particular on internet exchanges and other alternative interconnection points which lose demand for their services as smaller firms exit the local market.

All of these issues have been observed in the South Korean telecoms market after the introduction of the Sender Pays model.

Adverse impact on the entire digital ecosystem, including smaller businesses

The impact of such measures would be hugely detrimental to businesses, both large and small, operating online in Europe. Even if technically imposed on the so-called 'large traffic generators', the proposed measure will have a negative impact on - <u>all</u> online businesses and the entire digital ecosystem. This is also the conclusion reached by BEREC. In its preliminary assessment, BEREC concludes that a model of direct payments "would provide ISPs the ability to exploit the termination monopoly and it is conceivable that such a significant change could be of significant harm to the

<sup>&</sup>lt;sup>15</sup> "<u>Afterword: Korea's Challenge to the Standard Internet Interconnection Model</u>", Park & Nelson, August 2021

<sup>&</sup>lt;sup>16</sup> Analysys Mason

<sup>&</sup>lt;sup>17</sup> Analysis Mason

<sup>&</sup>lt;sup>18</sup> Analysys Mason



internet ecosystem".<sup>19</sup> This is the same concern that led the EU to introduce the net neutrality principle.

Indeed, the introduction of fees will jeopardise the level playing field and the overall net neutrality principle. The fees will inevitably change the relationships and bargaining positions between telcos and the largest digital providers to the detriment of the smaller internet players, which will be automatically deprioritised and treated differently in case of technical issues/problems with traffic.

Moreover, the increased costs due to the introduction of the fee will be passed through across the value chain and down to other back-end internet players, who rely on telcos and the infrastructure services of the largest digital players to be able to provide their services and operate. Many of these businesses are yet to break even and are not profitable. Higher operational costs for them could permanently undermine their ability to compete on the market and ultimately force them out.

Finally, individual European businesses would experience increases in the cost of delivering their traffic in the EU.

Adverse impact on larger CAPs and digital service providers

Larger firms such as CDNs and cloud providers would experience increasing cost which may have collateral impact on the sustainability and diversity of competing firms in these markets. CAP traffic includes hundreds of thousands of other companies that would be impacted and experience higher costs. Introducing a network usage fee, may impact an array of European players (including SMEs), who rely on cloud-based distribution infrastructure. <sup>20</sup>

In this debate, traffic is assumed to be predominantly generated by large CAPs, whereas in fact data traffic is also driven by other companies and sectors which would likely experience a knock on increase in costs. To provide some examples, Google Cloud traffic is actually not just Google's, and would include traffic by sites like Wikipedia. In Europe, companies such as France's *BlaBlaCar* deployed its data infrastructure on Google Cloud in 2018 to radically scale up its global operations. Today, BlaBlaCar uses Google Cloud's Big Query engine to analyse petabytes of data per day to drive user improvements. Furthermore, Finnish mobile game developer Supercell uses Amazon Web Services' (AWS) content delivery network to distribute assets to its 250 million globally distributed players across all Supercell games. Germany-based N26 is a bank built in the cloud with AWS, supporting more than 2.3 million customers across Europe and handling around \$1.5 billion's worth of transactions each month. Spain's Futbol Club Barcelona uses AWS services to support 6,000 web pages & 12,000 digitised photographs and manage traffic spikes. All of these services would be impacted by the introduction of network fees that impact CAP traffic.

In addition, a number of telecoms operators are customers of various Cloud providers for running elements of their network and business. This would mean that telcos' own traffic would be subject to these fees: Working with AWS, Telenor implemented an entire mobile core, running in the cloud, for Vimla—Telenor's virtual mobile network operator brand in Sweden. Vodafone is a customer of Google

<sup>&</sup>lt;sup>19</sup> "BEREC preliminary assessment of the underlying assumptions of payments from large CAPs to ISPs", October 2022

<sup>&</sup>lt;sup>20</sup> Plum Consulting finds "FFT's proposal is misguided" in recent analysis – DOT Europe, February 2023



Cloud for data analytics, Telefonica O2 Germany is moving their 5G Core network platform to Google Cloud.

# Adverse regulatory spill-over effects outside the EU

Finally, there is a further risk of a network fee being emulated in other countries. As the EU positions itself as a regulatory standard-setter, were network fees to be introduced, it could open the door to other third countries introducing similar retaliatory measures which would target companies trying to enter their market, including EU companies seeking to grow globally. We already see evidence today that other geographies are looking at the possibility of introducing such measures just because they hear of it being considered in the EU. This may mean that European businesses that would like to operate beyond the EU would face new barriers to market entry and would need to negotiate fees with every telco in every geography they choose to operate.

# Contradictory to EU Digital Decade objectives

The public consultation references the Digital Decade vision and policy programme, highlighting its connectivity goals. However, the Digital Decade goes way beyond connectivity. The European Commission wants 75% of EU SMEs using cloud, AI and / or big data, while at the same time seeks to double the number of EU unicorns. It also aims to have provision of public services be 100% online; and give 100% and 80% of EU citizens access to e-health and e-identity solutions, respectively. Achieving these goals requires higher data traffic. The EU has also mandated a switchover of broadcasting from analogue to digital, meaning that many European broadcasters are significant bandwidth users for video on demand services.

This means that the introduction of a network fee for large traffic generators would come in direct contradiction with these goals. Any organisation that requires more data to grow would have a disincentive to do so, for fear of being caught within the scope of network fees. Such a move will send the wrong signal to every other sector of the economy seeking to benefit from the Internet-driven Industry 4.0 and cloud services <sup>21</sup>. A levy could also erode the economic benefits of, and demand for, fibre and 5G rollout – a long-standing objective of the European Union.

# Negative impact on cybersecurity & resilience

The introduction of a network fee would, with the blessing of legislators and the force of regulation, give the telco operators more power in the negotiations on IP interconnection. This risks leading in particular to the telco operators limiting the number of interconnection points, forcing inefficient routing, which would negatively impact the resilience of the internet ecosystem. <sup>22</sup> A large number of interconnection points and links indeed contributes to the resilience, efficiency and thus cyber protection of the internet.

Moreover, adopting a traffic-based fee would act as a disincentive for third parties to send regular updates to their customers, including to address cybersecurity issues, for fear that they would incur additional fees because of higher traffic volume.

<sup>&</sup>lt;sup>21</sup> Plum Consulting finds "FFT's proposal is misguided" in recent analysis – DOT Europe, February 2023

<sup>&</sup>lt;sup>22</sup> As echoed in the Euro-IX letter to the European Commission on 3<sup>rd</sup> January 2023



# IV. Technical and implementation challenges

Distortive and disproportionate measures that are impossible to implement

The introduction of a network fee can be considered both distortive and disproportionate. It is important to remember that internet traffic is not correlated with revenue: some CAP services make large profits with low traffic; and vice-versa. As such, a levy linked to use of bandwidth would favour some players over others in a seemingly arbitrary manner. For example, e-commerce or stock trading companies have larger profit margins with relatively little data traffic. Video services, on the other hand, although making up an estimated 70% of internet traffic, only account for 2% of the total revenue of Internet services<sup>23</sup>. Basing a network fee on the amount of data circulating would thus not meet fairness criteria.

Furthermore it is technically practically impossible to identify the source of traffic online in order to apply the levy to individual CAPs, without using invasive packet inspection technologies. CAPs can host their services in a multitude of Cloud or CDN service providers and user-facing traffic is encrypted. Untangling the provenance of network traffic and attributing it to specific operators is clearly inefficient and disproportionately costly, and would go against the grain of the privacy and data protection agenda, imposing what would essentially amount to a wide and intrusive monitoring obligation.

Even if a technical solution to this problem is found, the customer case studies presented above show that a large part of the traffic nominally from "larger CAPs" companies is actually from many thousands of other organisations using their services.

# Net neutrality

Traffic delivery charges for CAPs would also be incompatible with the principle of net neutrality, as established in the Open Internet Regulation, which regulates how ISPs deal with traffic requested by end-users from CAPs. According to these rules traffic can only be blocked or slowed down where necessary to ease congestion or other forms of traffic management. The notion of applying a fee to parts of the traffic on the basis of origin will necessarily lead to discrimination and therefore conflicts with the principle of net neutrality. Given that many telco providers are also content providers, the non-discrimination principle would also involve levying the telcos' own downstream content businesses

Another concern is that, as it is difficult to determine the origin of traffic, there is a severe risk of double-counting when introducing network fees.

Moreover, if the penalty for noncompliance were that end-users would not be able to access CAP content, the principle of net neutrality would be further weakened. In South Korea, where such a proposal was implemented, further regulation was required to try and deal (unsuccessfully) with the knock-on effects of a traffic delivery fee, as CAPs attempted to reduce traffic or change delivery mechanisms to mitigate costs.

Whereas there have been a number of claims made by the European Commission that this would not impact net neutrality we have difficulty seeing how this can be avoided in practice.

<sup>&</sup>lt;sup>23</sup> Net neutrality in the UK: Networks versus content?, Enders Analysis, January 2022



#### Compliance with WTO

At the very least it is uncertain to what extent a traffic delivery fee on CAPs would be compatible with EU commitments under GATs, such as national treatment (because of the mostly non-EU companies that would be liable); and most-favoured nation insofar as it treats digital services imports differently depending on the threshold for the tax.

#### OECD Pillar I

A potential network fee would likely meet the definition of 'other relevant similar measures' that the OECD member countries have agreed to refrain from adopting while Pillar I of the Inclusive Framework is implemented. The EU moving forward with this tax could be considered a violation of this agreement and could result in a USTR investigation and trade sanctions.

#### State aid concerns

Organizing a payment system between different market players that is not justified on the basis of objective circumstances risks amounting to state aid and thus running concerns from that perspective. The introduction of network fees would amount to state aid, since it is not connected to the provision of a new service. Operators are effectively asked to pay more for the same service without any tangible benefit.

# V. Opportunities for telcos

DOT Europe would like to take the opportunity of this consultation to highlight that the focus should not just be on data traffic and investment in networks, but also on the possible new revenue streams that developments in the electronic communications market can bring for telecoms operators. The sector can move beyond providing infrastructure to capitalise on other technological developments.

Computationally intensive systems, like the metaverse, are expected to present a significant commercial opportunity, and even create entirely new markets, generating revenue streams beyond the sale of data packages for the telecoms industry. It would be misleading to use only this commercial aspect as a method to calculate a return on investment. Estimates vary, but telcos can tap this new market via joint ventures, partnerships, and, in some cases, independent development of products and services. There are numerous case studies showing partnerships between telcos and other business sectors in the fields of infrastructure, extended reality, human-machine interfaces etc.

There are already numerous cases<sup>24</sup> where telecoms operators have partnered with other organisations. For example, Verizon is working with Meta to develop advanced Metaverse capabilities on its 5G fixed and mobile connectivity. Verizon will deliver Meta's augmented reality apps, likely tied to a connectivity subscription model, possibly coupled with a revenue shared model. Vodafone has developed its own Metaverse, in partnership with Nreal, using the company's AR glasses on Vodafone's 5G infrastructure, enabling content generation and social functionality. Vodafone expects to monetise this via a connectivity subscription model, but also by benefitting from royalties on transactions that take place on its platform, and potentially through its partnership with Nreal.

Similarly, Telefónica, through the hub Wayra announced a partnership deal with Meta to launch a "Metaverse Innovation Hub" in Madrid, focussing on the infrastructure and experience continuum layers. This includes a 5G laboratory that will support local start-ups and developers to utilize a Metaverse end-to-end test on Meta and Telefónica's network infrastructure and equipment.

<sup>&</sup>lt;sup>24</sup> "The Metaverse: What's in it for telcos?", Arthur Little consultancy, October 2022



These examples show that telcos are in a good position to move through the value chain and benefit from the total value created. There is considerable opportunity in infrastructure; world engine, extended reality, human-machine interfaces, experience continuum and other key enablers of this technology.

This is a clear sign that changes in the electronic communications sector mean more than investment in networks and the provision of data packages for consumers. Singling out costs to upgrade network infrastructure obscures a more nuanced picture where telcos stand to benefit, not only by capitalising on infrastructure, but by using technologies developed by them or by potential partners. The relationship between network operators and the wider technology sector is more symbiotic than competitive.

#### VI. Next steps after the exploratory consultation

DOT Europe maintains that the discussion on a network fee has been poorly defined the underlying issues and prematurely focused on a very specific intervention. The consultation asserts that there is an investment gap in network infrastructure; and that existing networks cannot cope with ever higher volumes of data: neither of these points is supported by evidence. The issue is also often framed as a big telecoms — big tech issue, ignoring the fact that a network fee would have wide-ranging consequences for consumers and businesses of different sizes and sectors; while contradicting stated EU policy objectives, threatening net neutrality and presenting substantial implementation challenges.

DOT Europe recommends that the exploratory consultation is followed by a period of evidence-gathering, focused on the following areas:

- Clear identification of specific failures in the current market for interconnection or financing
  of infrastructure in areas where it is economically unviable (e.g.: rural communities) and
  identification of tangible market failures in the infrastructure market.
- Assessment of value of investments in content and services, as well as infrastructure, in order to rebalance the assessment of 'fairness'.
- Quantification of the extent to which telecoms providers benefit from the current system of interconnection, including investment by third parties and the current system of settlementfree peering.
- Thorough assessment of the consequences of the sender-party-pays approach in South Korea, including the forced market exit of some smaller, competing firms and the downstream effects on other providers of essential infrastructure such as internet exchange points.
- Analysis of the interests of the proponents of the infrastructure levy as compared with those
  of their smaller competitors and the likely impact of a levy on competition in the wider EU
  telecoms market.
- Consideration of alternative ways to increase network efficiency, such as allocation of sufficient spectrum to ensure WiFi networks reach their full potential and can be used to offload more mobile traffic onto them.

DOT Europe urges policy makers to carefully examine these areas in order to fully understand the state of the electronic communications market before jumping into premature conclusions. We believe that, although a discussion on public goods, services and infrastructure can be held, this should be on the basis of evidence and avoid simply putting in place a measure that takes funds from one sector to give to another.