Danish non-paper on the European Commission's Public Consultation on the future of the electronic communications sector and its infrastructure

Denmark welcomes the opportunity to comment on the Commission's Public Consultation on the future of the electronic communications sector and its infrastructure.

1. Technological and market developments: impacts on future networks and business models for electronic communications

Our economies and societies will undergo a massive digital transformation in the years to come. The need for this was intensified during the lock-downs caused by the Covid-19 pandemic. There are no signs of this need slowing down in the near future where we will also face serious challenges from climate change.

As part of this transformation, the telecommunications sector is under rapid change. As pointed out by the OECD, technological convergence has led to an evolving competitive landscape and new challenges. At the same time, the current international situation is a clear indication that the telecommunications sector has to reinforce its commitments in the field of network security and privacy protection.

Denmark is of the opinion that:

- Europe needs to maintain a strong focus on transparent and predictable framework conditions that will ensure a strong and well-functioning market for electronic communications with a high level of private investments.
- Europe should continue its technological neutral approach to regulation in the field of telecommunications.

In Denmark we expect to witness a strong market focus on the roll-out of VHCN (fibre and 5G) towards 2025 and further on. Currently, there is no decision on copper switch-off. But we are seeing indications that a decision is getting closer. The challenge arising from this will be to ensure that no one is left behind, in particular in rural areas.

We aim to ensure full broadband coverage primarily through market roll-out. We recognize, however, that there will be local pockets where state aid may be necessary in order to cover the last few addresses. But state aid or other public funding mechanisms should always be the last resort.

2. Fairness for consumers

Denmark recognises that a Union-level legal framework containing rules on universal service obligations is a useful tool – when taking national circumstances into account – to ensure that at least the electronic communications services (adequate broadband internet access and voice communications) are available to all consumers at an affordable price in the Member States.

Denmark is of the opinion that:

- Any initiatives within the EU regulatory framework on electronic communications must be flexible and should not disturb the market in a way that would disincentivise private investments.

The appropriate way to finance universal service obligations within electronic communications will depend on the service in question as well as the particular Member State. Flexibility when choosing the specific model will be key, as it is very important to have and maintain good working relationships with all stakeholders to ensure predictable and transparent framework conditions for the electronic communications services sector.

Rules on universal service obligations have been important to limit any barriers people with disabilities may face to access networks and technological developments on equal basis with others. Again, the importance of a flexible regulatory framework cannot be underestimated ensuring that the best solutions from a legal and financial point of view are available at the national level. This also applies to any considerations regarding the future connectivity needs that should be ensured for all consumers.

Whereas the current economic situation, the rising inflation and cost of energy may make adequate broadband less affordable to consumers with low income or special social needs, any initiatives at the EU level to curb this development must carefully consider the potential ramifications of the specific initiatives. It is pivotal that any initiatives are flexible allowing the Member States to apply specific initiatives in a way that is tailor-made to the consumers in the specific Member State.

3. Barriers to the Single Market

Denmark recognises that the Commission finds it relevant to discuss the potential for further harmonisation measures in the spectrum area in order to promote investment and the integration of the internal market in electronic communications networks and services.

Denmark is of the opinion that:

- It is essential to retain the flexibility bestowed on Member States in the EU regulatory framework on electronic communications so that Member States may take national circumstances into consideration in the political decision-making process.
- A more integrated radio spectrum market in the EU risks sparking a consolidation in the market to the detriment of competition, innovation and growth and ultimately consumers and businesses.

In this way, differences between Member States, e.g. with regard to mobile broadband coverage and market and competition specificities, can be accounted for in order to reach the goals for connectivity set out in the Digital Decade Policy Programme as well as the broad policy aims and objectives in the EECC Directive. In addition to the promotion of a digital internal market, these aims and objectives include good quality, affordable and publicly available services, roll-out of very high capacity networks, the promotion of competition and of the interests of the citizens of the Union.

A more integrated radio spectrum market in the EU, through for instance a common EU-level spectrum licencing or authorisation scheme, risks sparking a consolidation in the market to the detriment of competition between market players, innovation and growth and ultimately consumers and businesses in Member States. In particular, it is important that Member States can facilitate the exploitation of technological developments without undue regulatory limitations or delays.

In the EU regulatory framework, a range of measures and opportunities to ensure a harmonised and coordinated spectrum policy and management at European level has been introduced quite recently. These include i. a. deadlines for the award of spectrum, common timing and joint authorisation and selection processes and procedures for limiting the number of rights of use to be granted. The full effect of these measures and opportunities is yet to materialise.

European cooperation in the spectrum area is functioning very well - in particular the work in the CEPT. The cooperation between the Union and the CEPT is established in the Radio Spectrum Decision and has since 2002 shown its high value for the EU Member States through the elaborate technical work in the CEPT which has been a solid foundation for spectrum decisions at EU level. It is a strength that the CEPT also includes

non-EU countries. This paves the way for harmonisation across the whole of Europe, fostering an even bigger market for the telecoms sector.

4. Fair contribution by all digital players

In the questionnaire the Commission raises the question whether there is a need to establish rules to oblige content and application providers ("CAPs") or other digital players to contribute to the electronic communications network deployment costs.

Denmark sees a clear need for an open and transparent debate before initiating any proposals in this field. Especially when it comes to potential new initiatives that may influence the relationship between telecom operators and providers of OTT services, it is important to analyse the issues thoroughly, as this is essential for the functioning of the Internet.

- Denmark is skeptical in principle of measures intended to make large OTTs or other digital players contribute to the cost of the deployment of networks, and strongly opposes any form of mandatory contributions, including taxes or funds based on the traffic that end-users request from CAPs or other digital players.
- Denmark is of the opinion that the solution to ensuring the necessary investments in roll-out of networks lies in effective competition policy, including the specific regulation in the EECC, along with programs like CEF Digital.

Such measures deviate from the principle of net neutrality. Deviating from this important principle would only be proportionate if the measures are ***necessary*** as well as ***effective***.

In terms of the ***necessity*** of the measure, Denmark does not share the assumption that network operators are unable or unwilling to invest sufficient amounts in deployment. Rather than a lack of funds to invest, the issue is in many cases that some areas do not offer sufficiently attractive business cases to attract investment, i.e. the problem is the geographical distribution of investments. Any constraints on deployment in attractive areas currently seem to be capacity, e.g. in the civil works industry, rather than funding. The additional funding itself does not seem to be necessary.

There is no causality whereby more traffic translates into higher costs for ISPs (Internet Service Providers). Fixed access networks are largely not traffic-sensitive, as reflected by the widespread practice of offering flat rates. The marginal cost of additional traffic in mobile networks is also quite low. There seems to be no clear cost generated specifically by CAPs or other digital players for which compensation is necessary.

The demand for traffic is what drives demand for subscriptions. In the absence of content providers, especially those providing traffic-intensive content requiring high data volumes and speeds, end-user demand for speeds, data amounts, quality of service etc. would likely be much lower. The general costs of delivering traffic within the data amount included in an end-user's subscription are an inevitable element of the business case of network operators. It is not necessary or reasonable to compensate operators for any costs associated with the primary driver of the demand for their product.

Looking at the ***effect*** of a potential measure regarding a "fair contribution", given that one primary issue in broadband deployment is covering rural areas, it should be considered whether the added funding from such a measure would improve poor business cases in rural areas. Absent specific requirements to reinvest any contributions in commercially unattractive areas, this would not be the case. In this scenario, "fair share

contributions" could simply lead to increased dividends or, in a "best case scenario", to the deployment of further parallel infrastructure in commercially attractive areas, while some rural areas would still be waiting for their first deployment of high-speed broadband. This would not help achieve the Gigabit target.

Alternatively, any requirements of specific investments based on the contributions would give rise to the need for complex and bureaucratic monitoring of the use of the contributions. Requirements to invest in specific areas could disrupt commercial market dynamics in much the same way as state aid, as operators' administrative resources and the capacity of the civil works industry are limited resources. Truly commercial deployment may have to be postponed to fulfil these requirements. Disrupting commercial deployment plans could have adverse effects on investors' willingness to invest in the telecommunications industry, leading to fewer funds for truly commercial investment. This implies a risk that network operators could become increasingly reliant on "fair share contributions" instead of investing their own funds.

From a ***consumer's point of view***, any measure of this type may also be harmful. Any potential "fair share contribution" may lead to increased consumer prices for OTT services, which would be harmful in times of increased cost of living. Such increased costs would disproportionately affect low-income citizens and could exacerbate digital and cultural divides between social classes. Earnings from royalties among artists distributing their creations via CAP OTTs may also be negatively affected.

Quality and choice in terms of content could also be negatively affected, as the measure could potentially lead to a lower incentive for digital players, e.g. a provider of OTT services, to invest in new attractive European or regional content which could lead to more subscribers, as more subscribers would lead to more traffic which in turn would lead to an increased contribution to the network operator, making it a poorer business case.

OTT service providers may also choose to exit markets and deprive consumers of services. In South Korea, the only country to have experimented with a "fair share" system, the contribution requirement has led to OTTs closing their cache servers in the country, leading to lesser quality of service for consumers.

The content provided by major OTT players in fact constitutes an important use case for broadband that gives consumers an incentive to buy subscriptions with very high bandwidth, and that demand can boost deployment. In this way, high-quality content with high data volumes gives end-users a reason to pay high premiums for subscriptions giving access to Gigabit speeds. The EU's Gigabit Target aims to achieve strategic goals of infrastructure deployment not primarily so that citizens can stream 4K video, but to support important goals such as ubiquitous access to e-government (for which low-speed internet is sufficient), autonomous vehicles or Gigabit connections for schools and hospitals for eEducation and eHealth. Citizens are unlikely to pay high premiums for high-speed internet subscriptions to access e-government solutions or to enable future technologies. Citizens co-finance internet deployment by buying high-speed subscriptions because of high-volume entertainment content from OTTs. Any measures reducing the availability or quality of high-quality, high-data volume content is likely to create an entirely different funding problem for broadband deployment.

In conclusion, Denmark strongly opposes any measure by which large OTTs or other digital players are obliged to contribute to the cost of the deployment of networks.