

# Deutsche Telekom Position regarding the European Commission White Paper on the Future of Digital Infrastructure

Deutsche Telekom (DT) welcomes the opportunity to provide comments on the European Commission's (EC) White Paper "*How to Master Europe's Digital Infrastructure Needs?*". We appreciate the initiative and the general direction of the White Paper and call on the EC to **follow-up with a concrete legislative proposal for a Digital Networks Act (replacing the EEECC) as soon as possible**, as urgent action is needed in light of the difficult state of the sector and the limited time left to achieve the 2030 connectivity targets.

Overall, DT fully subscribes to the analysis of the difficult state of the sector in the White Paper (i.e. low ARPU & return on capital, investment gap to reach the 2030 targets, etc.).<sup>1</sup> We therefore strongly welcome that the EC is envisaging an ambitious reform of the telecoms framework, with the aim to fully reflect the changed market realities and extend the list of policy objectives to **economic security and industrial competitiveness**.

In the following, we summarize our key recommendations on the most important aspects of the White Paper.

## 1. Changes in the Digital Infrastructure Ecosystem and the need for a Level Playing Field

Today, **about 70 percent of international bandwidth capacity is used by a handful of major Content and Application Providers (CAPs)** while traffic is mainly running through their proprietary backbone networks. This number stands in stark contrast to the less than 10 percent observed prior to 2012. On the transatlantic route, large CAPs even account for over 90 percent of used capacity, marking a significant shift from an open, decentralized, and user-centric internet to a highly concentrated content delivery network for large CAPs<sup>2</sup>.

At the same time, **connectivity services are no longer bound exclusively to the networks of telecom operators**. The use of fixed and mobile telephony is continuously losing ground to voice and video telephony via online services (e.g., WhatsApp, Signal). Beyond telcos' core business, large CAPs have also entered various other market segments that were previously supplied by 'traditional' telecom operators (e.g. private networks, B2B connectivity)<sup>3</sup>. Consequently, CAPs and telcos are now **often competing in the same / comparable service segments**.

However, today, different rules apply depending on whether a communication service is offered by a telco or a CAP. Even though there have been a number of regulatory initiatives aimed at the digital sector (e.g. DMA, DSA, Data Act), the **lack of a regulatory level playing field between CAPs and telcos remains unaddressed** with negative implications for the industry but also for consumers who are faced with different rules and rights depending on the type of connectivity service they use. For example, CAPs exert control over the quality of user experience through network, application, device, or software solutions – but are - in contrast to internet access providers - not subject to any net neutrality rules. This regulatory asymmetry should be addressed.

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<sup>1</sup> A recent HSBC report underlines the alarming situation the sector finds itself in, estimating that only 4 out of 12 analyzed EU operators are able to cover their costs of capital by claiming a RoIC above WACC: HSBC Global Research, European Telecoms, New Commission 2024-29: what's in store for telecoms, 24 June 2024, p.10.

<sup>2</sup> TeleGeography, The State of the Network in 2024, available at <https://blog.telegeography.com/the-state-of-the-network-in-2024>

<sup>3</sup> Draft BEREC Report on the entry of large content and application providers into the markets for electronic communications networks and service, March 2024.

Key recommendations:

- Extend the scope of future applicable rules for traditional telecom operators to other relevant actors in the digital infrastructure ecosystem
- Address regulatory asymmetries between CAPs and telcos, ensuring both sectors adhere to similar standards regarding e.g. privacy, security, and consumer protection
- Introduce Open Internet principles for CAPs in the connectivity ecosystem, ensuring they do not use their proprietary infrastructure to unfairly influence e.g. quality of service

**2. Moving Away from ex ante SMP Regulation**

The telco regulation of the past 20 years with its one-sided focus market entry seriously harms the economic performance of the sector and its investment ability. The **current rules no longer reflect today's market realities** characterized by high levels of infrastructure competition based on fibre and cable networks. These rules are clearly **unsuited for a full fibre environment** where different market players build out regional fibre networks in competition. We therefore consider today's **ex-ante SMP regulation** - based on pre-defined markets and presuming the market power of a single operator - as **obsolete**.

Consequently, we **strongly welcome the intention of the European Commission to move – as a general rule – away from ex-ante SMP regulation** towards the application of ex post competition law. Once there is an adequate choice of internet access offers for end users in a given location, there is no reason for any ex-ante regulation to apply. Consequently, and as a first immediate step, **markets should no longer be recommended at EU level**. This also means that no new market for civil engineering should be introduced.

While we acknowledge that **local bottlenecks** may still exist in some cases, necessitating some form of intervention, we disagree with the idea of keeping a “safety net” in place, **as long as this would mean upholding the very same SMP regime** that has led to today's outdated and one-sided regulatory practice applied by NRAs. Instead of SMP, a safety net regulation should be limited to address local bottlenecks, where customers do not have at least a potential **choice between broadband services** from competing providers. Rules for such a bottleneck regulation should be strictly **symmetrical**.

Key recommendations:

- Abolish ex ante SMP regulation and the definition of relevant markets at EU level
- An exceptional regulatory “safety net” may be kept in place, but should address only persistent local bottlenecks where 1) only one infrastructure is in place and 2) no wholesale access is being provided by that infrastructure owner, leaving customers without choice as regards their broadband access provider
- Rules for these bottlenecks should be strictly symmetric
- We strongly caution against the idea of a “standardized EU access remedy” due to its potential to add another layer of access regulation at EU level and to become an unintended incentive for large CAPs to enter further parts of the connectivity value chain.

**3. Fair Share: Introducing a Dispute Settlement Mechanism in case commercial negotiations fail**

**Fair Share is still a key issue** and has gained momentum also globally due to ongoing discussions for example in Brazil, South Korea, and India. In view of the continuous **growth in data traffic** (annual growth rates of 25 to 50 percent<sup>4</sup>), the situation remains untenable also in the EU. The core problem remains that prices for data transport services are marginal to zero and traffic growth cannot be monetized despite increasing costs which are in turn driven by traffic-sensitive investments in infrastructure (e.g. in network densification, additional spectrum).

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<sup>4</sup> Cf. Sandvine, Global Internet Phenomena Report, 2023, p. 7.

Therefore, we **highly welcome that the European Commission explores the introduction of a dispute resolution mechanism** to bring commercial negotiations between ISPs and CAPs for direct data transport to fair outcomes. However, the time for a regulation is now and not in the future when more disputes arise. The recent **judgement of the district court Cologne** in the case Telekom against Meta Platforms reconfirms that telecom operators can demand payment for a valuable data transport service<sup>5</sup>. However, **it cannot be the solution to refer network operators in Europe to the courts** in order to reach an agreement on fair prices for data transport.

Key recommendation:

- Introduce a dispute settlement mechanism at EU level in case commercial negotiations over fair prices for valuable data transport services fail

#### 4. Creating opportunities for the industry to scale

Today, there is no such thing as an EU Single Market for telecoms. Therefore, we **support the intention expressed in the White Paper to remove / streamline national barriers** (e.g. sectorial regulation, consumer standards, security provisions such as lawful interception and others) to provide incentives for operators to roll-out cross-border services within their footprint.

We fully agree that the **lack of scale is a key hurdle for the competitiveness of the EU telecom sector which must be urgently addressed.**

However, the vision of achieving a ‘Telecoms Single Market’ by facilitating the roll-out of cross-border services is likely more of a **long-term ambition and will not lead to sufficient economies of scale** on its own.

Moreover, there is a risk that the introduction of a so-called “**country-of-origin**” principle could lead to **regulatory arbitrage**, with operators exploiting the differences in the application of legal requirements depending on their country of establishment. This would ultimately lower consumer standards across the EU, leading to a **race to the bottom**.

What the sector truly needs is a **new approach to competition policy** and considering wider dimensions like sustainability, industry competitiveness and economic security as the White Paper suggests. More concretely this means factoring in a more long-term investment perspective and accounting for efficiencies in mergers. Today, we are facing very **fragmented national telecommunications markets**, with little cross-border synergies. Hence, the real lever for the sector, which is heavily driven by fixed costs<sup>6</sup>, to achieve economies of scale and density and to become globally competitive lies in **in-country consolidation**.

Key recommendations:

- We caution against the introduction of a country-of-origin principle without appropriate safeguards protecting against ‘hit-and-run’ market entry and exit and arbitrage-based business models that exploit differences in national markets and legal requirements
- In the short- to mid-term only in-country consolidation will allow telecommunication operators to gain the necessary economies of scale to bridge the investment gap for infrastructure roll-out
- Adapt the EU merger regulation to allow for a more long-term perspective and to better take into account efficiencies and the impact of mergers on EU competitiveness and economic security

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<sup>5</sup> <https://www.telekom.com/en/company/management-unplugged/details/meta-must-pay-for-the-use-of-the-networks-1066682>

<sup>6</sup> HSBC Global Research, European Telecoms, New Commission 2024-29: what’s in store for telecoms, 24 June 2024.

## 5. Spectrum Policy

We fully support the European Commission's analysis that the current auction regime has put an unsustainable burden on Europe's mobile operators and impeded sufficient investments in infrastructure by drawing valuable resources out of the market that could have been used for network rollout. However, the White Paper misses to address the root problems by **lacking meaningful proposals that could change the current status quo**.

### Key recommendations:

- Promoting swift availability of spectrum by unconditionally supporting the **full utilization of the existing 5G Pioneer 3.5 GHz-Band** for public mobile networks without any set-asides, the rapid and Europe-wide harmonized availability of the **upper 6 GHz band** as a foreseeable key band for 6G, and a clear commitment for the designation of the **UHF-band** for 6G area coverage from 2030 onwards
- Enabling long term investment by fostering **license prolongations and renewals in the short run**, and ultimately **indefinite licenses in the longer perspective**. The Commission should create a framework that guarantees permanent utilization of spectrum by operators under the condition of efficient usage of the respective spectrum. License prolongation and default durations of at least 20+20 years (see Spain), or preferably indefinite licenses (see US), would strongly support infrastructure roll-out
- **Access obligations need to remain a last resort** based on thorough justification in line with the regulatory framework and may not be misused as a tool for discretionary market-shaping or preferential treatment of non-investing players
- **Keep proven governance structures**. The EC should not duplicate or even compete with European harmonization work in CEPT. Timelines of spectrum allocations and technology evolutions like the introduction of 6G / the phasing out of 2G/3G should be left to the Member States and the national operators.

## 6. Industrial Policy

The White Paper rightfully highlights the increasing convergence between connectivity, cloud and related services. These changes must not only lead to a new regulatory approach to digital infrastructure but should also be reflected in the EU's approach to industrial policy. What is needed is a full integration and **streamlining of industrial policy objectives across various policy areas** with the goal to strengthen EU capacity building in key technology areas. Creating the right framework conditions and incentives for the sector to innovate should be at the center of such an industrial policy approach. This includes the promotion of EU sovereign technology solutions (e.g. through funding, public procurement) but also the removal of barriers to innovation when it comes to the introduction of new services and technologies. This is especially relevant for the adoption of innovative 5G use cases, for which legal certainty is urgently needed.

### Key recommendations:

- Promote the **adoption of EU sovereign technology** solutions at scale, e.g. by supporting the inclusion of harmonized sovereignty criteria in the EU Cloud Certification Scheme (EUCS)
- Explore the introduction of **specific take-up targets on EU technology** (e.g. percentage share of contracts awarded to EU companies) as part of EU public procurement guidelines
- Create a **one-stop-shop for funding** on connectivity, **cutting red tape** and accelerating approval processes (especially for IPCEIs)
- Extend the existing **IPCEI-CIS** to compensate for the missing time scope due to the long notification phase. Support measures that facilitate openness, interoperability and federation of different cloud solutions as well as the build-up of an AI-ready computing infrastructure



- Call on the EC to develop a **5G Recommendation**, providing clear guidance on how the current Open Internet Regulation (“OIR”) should be applied to 5G use cases

## 7. Sustainability and EU Taxonomy

Capital markets and investments in green technologies are crucial to master the green transition. The EU Commission has outlined its intention to **work with operators on KPIs to become eligible for the EU taxonomy**. We fully support this aim – this would recognize not only the substantial efforts taken by European telecoms network operators to reduce their emissions and environmental impact, but also the fact that telecommunication networks and services are an indispensable component in the greening of the whole economy.

### Key recommendations:

- Swiftly include the deployment and operations of telco networks in the EU Taxonomy as an eligible economic activity, as part of the next review of the Climate Delegated Act
- The EU Commission should mandate the Sustainable Finance Platform to further improve the cross-sector applicability of the reporting requirements of the EU Taxonomy in order to realise its full potential. This should be done in close cooperation with the relevant sectors.

## 8. Copper Switch-Off

While we consider the objective of the EC to aim towards a copper switch off to be a right policy goal, we believe it **should not come via a binding deadline**. The timetable for copper migration should not be determined by political goals, but by the actual progress in fiber optic expansion, especially when it comes to nationwide coverage. A mandatory switch-off would completely disregard the **different levels of fibre rollout in the Member States**. Such a step would be highly **problematic in terms of consumer interests** as it could lead to the reduction of infrastructure-based competition and hence a lack of user choice.

The process of switching off a copper network is inherently complex and depends on many factors, company-internal and external. To preserve infrastructure competition, **a copper network should only be switched off where a fibre access by the same operator is available**. Otherwise, regulation would severely intervene in a market obliging the copper owner to either shut down its network (and de facto its customers) and leave the area – or force this operator to commercially seek access from a competitor’s network in that area, which in consequence would become a local monopoly.

### Key recommendations:

- Refrain from setting a mandatory switch-off date for copper. Instead, incentivize migration from copper to fibre e.g. by allowing more alternative deployment methods (e.g. trenching)
- Operators who own and run copper networks should remain in the driver's seat. The EECC and its national implementations in EU Member States already provide for sufficient safeguards and a solid basis for the aim of a sustainable and pro-competitive copper switch-off

## 9. Universal Service

Today, almost every citizen has access to basic broadband internet service, which enables the use of basic services like browsing, social media, video calls or eGovernment services. Additionally, prices for telecommunication services in the EU have been decreasing over the years and with a huge variety of offers, consumers have the choice to select any offer according to their need. Thus, competition has created an environment where **almost all end-users have access to affordable broadband services**. Due to further network deployment and coverage with fixed, mobile and satellite networks, the **relevance of universal service is likely to decline** - and **eventually it may become obsolete**.



**Existing gaps in the network should be closed in the first place with public funding.** Publicly financed end-user vouchers may help to increase take-up rates for services on fibre networks and increase the number of citizens benefiting from the best available networks and services.

Key recommendations:

- Universal service should remain limited to ensuring access to basic broadband services at an affordable price for consumers. Extending affordability to high-speed broadband internet services would hinder investments in network deployments.
- Publicly financed end-user vouchers may help to increase take-up rates for services on fibre networks and increase the number of citizens benefiting from the best available networks and services

## 10. Quantum encryption

The imposed threats by recent and foreseen developments concerning the capabilities of quantum computers has correctly been identified and we agree with the necessity of taking actions. Instead of focusing strongly on PQC, we recommend to put higher attention on QKD and adopt a hybrid approach, combining the advantages of both. The rationale for this view is that no guarantees can be given on the long-term security of new PQC algorithms.

Key recommendations:

- Adopt a hybrid approach that supports both the development of PQC and QKD
- Further support the development of a European QKD platform building on the EuroQCI project