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The Digital Networks Act will redefine the Digital Network Infrastructure (DNI) of our telecoms regulation and the Gigabit Infrastructure Act (GIA): reducing costs or more of a burden?



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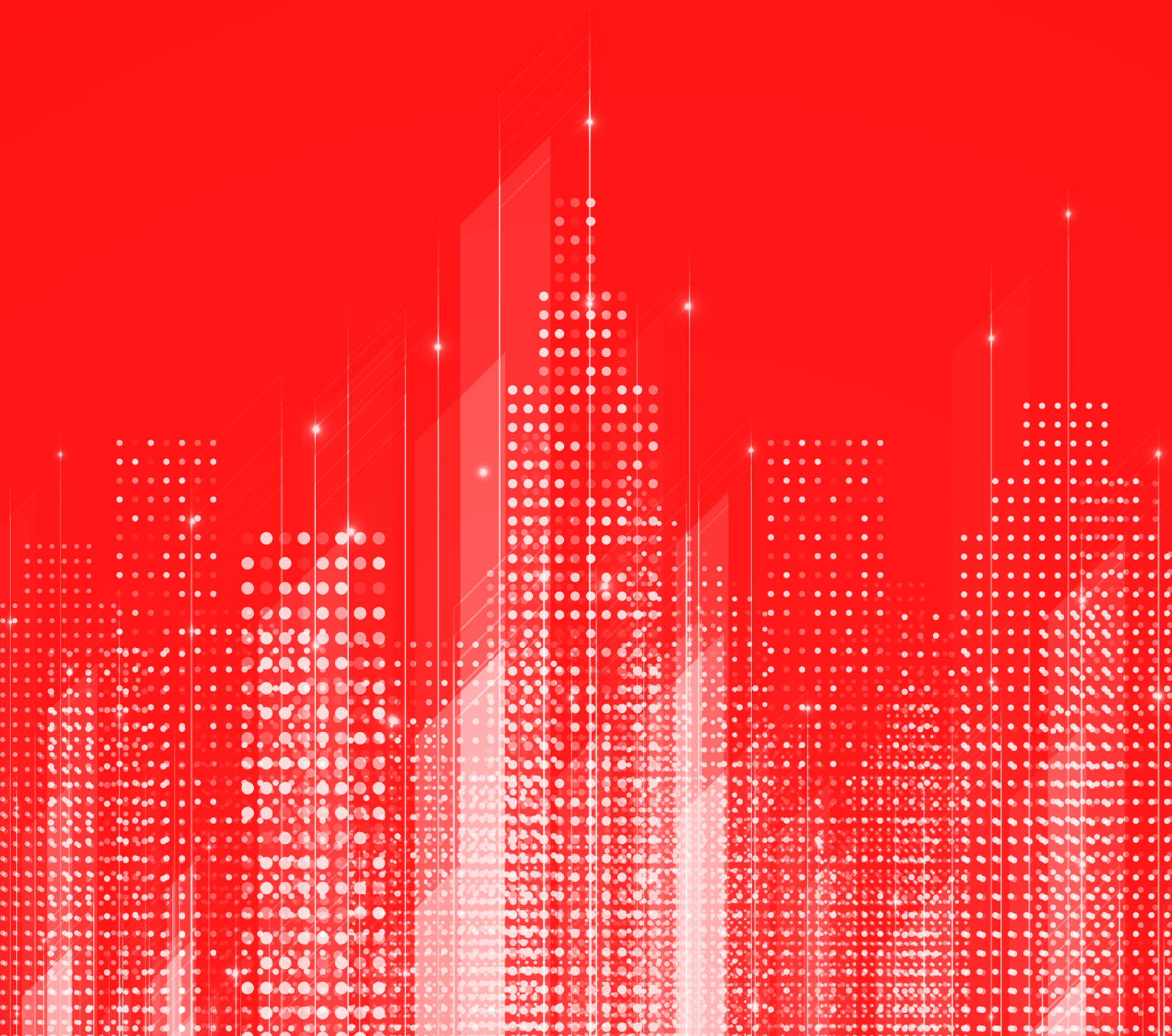
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Keynote

**The future of telecommunications
in the EU: opportunities and
challenges**



Przemyslaw Kordasiewicz¹

European Commission

Good morning, ladies and gentlemen. It's a great honor for me to be here today. We are in a time of pivotal changes and unprecedented transformation for the telecom industry, and there is no better time to talk about the challenges and opportunities regarding the sector. I see those changes in a threefold manner. First, there is the technological transformation of the legacy network to fiber, virtualization, cloud, edge computing, and AI, which blurs traditional boundaries and creates a single computing continuum. Second, there is achieving a single market and scale, which is necessary to make investments and deliver technological transformation. Third, there is security. Given the geopolitical challenges at hand, one must invest in secure and resilient infrastructures, both terrestrial, such as submarine cables, and wireless, in close collaboration with like-minded and trusted suppliers, which can help paint a larger picture. Europe is undeniably at a crossroads in this regard.

The EU has set ambitious digital targets for the Digital Decade 2030² and Europe's digital transformation. The future competitiveness of the European economy depends on advanced digital network infrastructures and services. This is because fast, secure, ubiquitous connectivity is crucial for the deployment of the technologies that will bring us to the world of tomorrow, such as telemedicine, automated driving, and industrial AI applications, and also ensure sustainability and security for our society, for example, food security due to precision farming.

In February of last year, that is, 2023, we launched a broad exploratory consultation on the future of the connectivity sector and its infrastructure³, which provided further insight into the situation of the sector and the technological and market developments that we are witnessing⁴. We see the convergence of electronic communication networks, such as cloud-based software-defined networks. Cloud and edge computing are revolutionizing the operation of traditional electronic communication networks, data transmission, storage, and computing. All these come together in what we call a computing continuum. Where does the EU stand on all of this? The picture, unfortunately, is not the best, as indicated in our first report on the state of the digital decade last year⁵. In 2022, fiber coverage reached only 56% of all EU households overall and only 41% of households in rural areas. Regarding 5G, 81% of the population is covered overall, but only 51% is covered in the rural areas. However, according to a recent industry report, only 10 of the 114 networks in Europe have standalone 5G. This means that often, the available 5G that you see on your mobile phone does not correspond to the full potential of this technology and it is far from ensuring the high reliability and low latency that the most advanced industrial use cases require.

The achievement of the ambitious target set in the digital decade communication will be difficult. To have all European households covered by the Gigabit network and all populated areas covered by 5G by 2030 will be a challenge for not only the industry but all of us, governments, consumers, and

¹ Mr Kordasiewicz spoke in a personal capacity. Thus, the views expressed were purely those of the speaker and do not necessarily reflect the views of the European Commission.

² The Council adopted a program on December 8, 2022 entitled "Path to the Digital Decade: the EU's plan to achieve a digital Europe by 2030." The program is intended to achieve the following: a human-centered and inclusive digital environment; more secure, accessible, and sustainable digital infrastructures; the increased use of skills in enterprises; online public services for everyone; and strengthened collective resilience. More information about the program can be found via the following link: <https://www.consilium.europa.eu/en/press/press-releases/2022/12/08/path-to-the-digital-decade-council-adopts-key-policy-programme-for-eu-s-digital-transformation/>

³ The European Commission opened this consultation to all stakeholders for 12 weeks, from February 23, 2023, to May 12, 2023. Access to the exploratory consultation and its questionnaire can be found here: <https://digital-strategy.ec.europa.eu/en/consultations/future-electronic-communications-sector-and-its-infrastructure>

⁴ The results of this exploratory consultation were three takeaways: 1) We need innovation and efficient investment; 2) we need to leverage the single market to boost investment and innovation, and 3) we need to secure our networks. These results can be found via the following link: <https://digital-strategy.ec.europa.eu/en/library/results-exploratory-consultation-future-electronic-communications-sector-and-its-infrastructure>

⁵ This report offers a vision for the entire European Union and also in specific State Members. Access to this report is available here: <https://digital-strategy.ec.europa.eu/en/library/2023-report-state-digital-decade>

investors. According to a study for the Commission⁶, reaching the current digital decade target for Gigabit connectivity and 5G may require total investments of up to €150 billion if the fixed and mobile networks are deployed independently and standalone 5G with full capabilities is offered. This amount could be even higher if we consider the investments needed for the full coverage of transport corridors and cloud solutions. This brings me to these investments.

The ability of our electronic communication operators to make the investments depends, first and foremost, on their financial situation and a sound regulatory framework. The most recent data available depict a sector affected by lower profitability and investments as compared with other regions of the world. One of the reasons which several stakeholders also highlighted in the context of this exploratory consultation last year is that the possibility of reaping the benefits of the digital single market is reduced by the fragmentation of the sector. This is due both to the cultural circumstances and market divisions. This fragmentation represents a barrier for operators attempting to acquire sufficient scale to sustainably carry out further investments in the network and technologies. Large investors with whom the Commission also had the opportunity to speak explained that such fragmentation and the consequent lack of assets of sufficient scale are crucial elements that reduce the attractiveness of the European electronic communication sector. Such fragmentation also prevents our EU operators from competing with their global peers. This is all the more true now that the boundaries between electronic communication networks and services and other digital infrastructures and services, such as cloud, are blurring. This fragmentation is very evident if we consider how the spectrum is managed in the 27 EU Member States. We see divergent national practices in terms of authorization processes, the timing of assignments, the choice of the most appropriate bands, and auction designs. The resulting outcome undermines investment capacities and negatively impacts the EU's economic growth, competitiveness, and cohesion. This brings me to the white paper⁷ provided in the commission's vision.

Against this background, the Commission adopted, on February 21, the white paper entitled How to Master Europe's Digital Infrastructure Needs. It is a forward-looking document that is intended to redefine the long-term vision for digital networks and pave the way for potential policy and regulatory measures, in particular those aimed at facilitating cross-border infrastructure in the single market to accelerate the deployment of new technologies and attract more capital to the networks. The white paper focuses on digital infrastructure needs. Of course, such infrastructure should enable the services of the future, both for industrial users and consumers. To dispel many misconceptions, the white paper does not address the issue of open Internet, or so-called net neutrality. There is no doubt that we are committed to protecting our net neutrality principles. In addition, in December 2022, all three European legislative institutions, meaning the Commission, the Parliament, and the Council, committed, under the European Declaration of Digital Rights and Principles for the Digital Decade⁸, to protect and promote a neutral, open Internet, on which content, services, and applications are not unjustifiably blocked or compromised. Consequently, the doubts about the Commission's action on the open Internet are not appropriate or justified.

What is the white paper all about? **The white paper sets out a number of potential measures to foster the innovation, security, and resilience of digital infrastructure.** The aim of the Commission is to launch a discussion of concrete proposals with stakeholders, the Member States, and like-minded partners regarding how to shape future EU policies on the connectivity sector. The white paper is based on three pillars, which are its main objectives. Today, I will focus on the Pillar 2, the challenges and a

⁶ A report was made in 2023 entitled "International benchmarking of private investments in Digital Decade thematic areas," which presents a wide-ranging analysis of private investments related to the Digital Decade thematic areas in the European Union in comparison with other relevant economic actors. The report examines investments in gigabit; 5G; semiconductors; edge computing; quantum technology; and the adoption of cloud computing, big data, and artificial intelligence by businesses. This report can be found via the following link: <https://publications.jrc.ec.europa.eu/repository/handle/JRC134743>

⁷ Access to the document is provided here: <https://digital-strategy.ec.europa.eu/en/library/white-paper-how-master-europes-digital-infrastructure-needs>

⁸ This declaration offers a reference framework for citizens and guides for the EU and Member States. A link to the document is provided here: <https://digital-strategy.ec.europa.eu/en/library/european-declaration-digital-rights-and-principles>

potential solution regarding the creation of a digital single market. However, let me first briefly refer to the other two pillars. Pillar 1 is **only investing in research and technology deployment to strengthen our technological leadership**. Europe is already a research and technology powerhouse. We don't need to look far for examples. Barcelona is home to the supercomputing center that hosts the Marenostrum computer. Ranked among the top supercomputing centers in the world, it has a budget of close to €40 million and employs 600 highly skilled staff. Now, we must invest in managing the current technological change and ensure that research leads to new markets. This is why we propose supporting the creation of a European ecosystem of innovators throughout the computing continuum. This means supporting the deployment of high-speed, secure end-to-end connectivity infrastructure to connect various actors and devices using terrestrial and non-terrestrial networks. They will invest this infrastructure with the necessary AI computing capabilities to deploy cutting-edge computing applications. **Pillar 2 focuses on completing a single digital market**. I will consider this issue in more detail in a moment. **Pillar 3 focuses on protecting our digital network infrastructure by making it resilient and secure**. Especially now, given the current geopolitical and security situation in Europe, we must step up our efforts to ensure that our critical infrastructure is safe and resilient. This also applies to submarine cables, as well as all other types of secure communications.

With Pillar 2, regarding the single digital market, we aim to **create a true digital single market with a forward-looking regulatory framework that reduces the fragmentation of the sector and creates a level playing field for competition**. By applying uniform rules based on, for example, the country-of-origin principle, for the core network and core network services, the core network operators in the EU would be able to exploit the full potential of the single market to reach a critical size, exploit economies of scale, and reduce their capital expenditures and operational costs, thereby consolidating their financial situation and attracting more private investment. This is not as simply a question of barriers arising because of the authorisation system. Barriers also arise due to various other regulatory obligations across the EU regarding, for example, networking services, incident reports, security vetting requirements, building lawful interception capabilities, data retention rules, and cybersecurity. This is the added value of applying, for example, the country-of-origin principle, at the very least for those rules which are relevant to the core networks.

This is also connected with the importance of the switch from copper to fiber to achieve the Digital Decade connectivity targets and the transition to the new connectivity ecosystem. It also importantly contributes to the EU's green objectives⁹. For this reason, the Commission is considering measures to accelerate the switch away from copper, such as setting a 2030 target, which is aligned with the Digital Decade targets for Gigabit connectivity, and also supporting a switch away from copper by 2028. At the same time, we want to **build on the Gigabit Infrastructure Act¹⁰ and the Gigabit Recommendation¹¹ to reduce the administrative burden of excessive regulation and, therefore, incentivize the faster deployment of new technologies**. This could mean avoiding the strict ex-ante regulation of markets and using the so-called three-criteria test to identify those markets that still require regulation given persistent market failures.

I would like to stress this in order to avoid misunderstanding: **competition drives investments**. Competition is crucial for technological development and our consumers and business, and we want to

⁹ In concordance with the Paris Agreement (2016), the EU design the European Green Deal is intended to achieve those goals in order to transform EU space into one with no net emissions of greenhouse gases by 2050, economic growth that is decoupled from resource use, and no person or place being left behind. For further information, access is provided via the following link: https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/story-von-der-leyen-commission/european-green-deal_en

¹⁰ The Gigabit Infrastructure Act was created to replace the Broadband Cost Reduction Directive, which was created in 2014. For more information, see the following: <https://digital-strategy.ec.europa.eu/en/policies/gigabit-infrastructure-act>

¹¹ The Gigabit Recommendation is a complement to other sources of guidance on the European Electronic Communications Code. To see more about the Gigabit Recommendation, click on the following link: <https://digital-strategy.ec.europa.eu/en/library/recommendation-regulatory-promotion-gigabit-connectivity>. To see more about European Electronic Communications Code, click on the following link: <https://eur-lex.europa.eu/EN/legal-content/summary/european-electronic-communications-code.html>.

protect them and benefit from the level of competition achieved to date. The need to provide further incentives for cross-border networks and services does not mean that effective competition will be hampered. In that sense, there is no contradiction between scale and competition in the Internet ecosystem. Scale and network effects play a major role, and we must offer the right incentives to European players to develop new and innovative business models and ecosystems so that Europe can take back its leadership role. However, **this is about giving the right incentives to the right players. There is room for both large and small players in this regard.**

Regarding the spectrum mentioned above, the Commission could consider more integrated governance at the Union level. This would, where necessary, allow for the greater harmonization of spectrum authorization procedures and create the conditions for cross-border networks and services and market size necessary to achieve greater investment capacity. The Commission may also consider solutions to ensure more uniform licensing and selection conditions or even a common selection or authorization procedure for terrestrial and satellite-based communication and other innovative applications. We should create a level playing field. This includes ensuring that rights and obligations equivalent to those already enshrined in the European Declaration on Digital Rights and Principles for the Digital Decade for all actors and end-users of digital networks. Therefore, the Commission could consider extending the scope and objectives of the current regulatory framework where appropriate to achieve the regulatory objectives.

This level playing field should also contribute to ensuring the competitiveness and sustainability of the sector. We must reflect on all the policy objectives of sector regulation, not only in terms of competition in the different telecom markets but also in terms of overall competitiveness and future sustainability, and this for all players, both big and small. Following the presentation of the connectivity package, the Commission launched feedback consultation on the proposals contained in the white paper. The consultation will end on June 13 of this year. We invite all of you to share your views in order to help us make it happen.

Finally, if all actors in the European ecosystem, including the operators, manufacturers, Member States, and regulators, work hard and live up to their promises, we will not only dream of a next-generation connectivity ecosystem spanning the entire technology continuum, semiconductors, computing capacity, the cloud, and AI but have advanced digital networks and services with fast, secure, and resilient connectivity and ensure Europe's future economic competitiveness. Thank you. I'm looking forward to the interesting exchanges and panel discussions. Thank you.

Roundtable 1

“Digital Networks Act” to redefine the DNA of our telecom regulation



Moderator:

Xavier Vives

Academic Director of PPSRC

We now give way to the roundtable on the Digital Networks Act. We'll have five excellent and diverse participants in our roundtable, whom you can see here. First, we have Alejandra de Iturriaga, who will be online, she is the director of telecommunications of the CNMC; Gonzalo López Barajas, Director of Corporate Regulation for Telefonica; Tobias Martínez, Chairman of the European Wireless Infrastructure Association; Maarit Palovirta, Senior Director of Regulatory Affairs of the European Telecommunications Network Operations Association (ETNO); and Ignacio Vela Navarro Rubio, Manager for Global affairs and Public Policy at Google. Thank you very much to all of you. It's a pleasure to have you here. You can offer a very interesting perspective on this. Before giving you the floor, I will ask you to make your main points in 5 minutes because we don't have much time. Then, we can enter into a dialogue.

I would just like to rephrase or remind everyone what our keynote speaker told us regarding the white paper on how to meet European digital infrastructure needs. He reminded us that **there are three main challenges**. There is one **technological** challenge, the transformation of legacy networks to fiber, for example. The white paper also says that the European Union does not lack fiber coverage in Spain. So, that's an important point. The second challenge is to complete the **digital single market and achieve scale for the operators**. Then, regarding **security and resiliency**, I think everyone is now aware of the vulnerability of cables and the potential for cyberattacks from unfriendly countries. This is not a theoretical possibility. We need a lot of investment, up to 300 billion, in a few years, maybe in a decade. So, that's a lot of money. The question is where it will come from. What's one of the key obstacles? The fragmentation of the European digital market is an obstacle to investment and scale.

From there, we will go to the measures intended to integrate the digital market, which you mentioned. By the way, fragmentation is also the keyword, and the completion of the digital market and, in general, of the single market, as described in the reports by Enrico Letta or the future report by Mario Draghi. The telecoms market is one of the three markets that the Letta report concentrates on, together with banking and energy. In this regard, there are two suggestions that I think I've taken from your presentation. One is to attempt to apply the country-of-origin principle for core networks and services. Here, I just would like to draw from my expertise in finance and banking. This did not work in banking. Why? Because the banking union was not completed. Until the banking union is completed, this will not work. So, there are different sectors focused on different problems, but there is an issue here to think about. The other suggestion that is very important is the management of the spectrum. The national management of the spectrum obviously introduces some obstacles to integration and competition. So, with further ado, let's just start with Gonzalo.

Gonzalo López Barajas

Director of Corporate regulation, Telefonica

Thank you very much for the invitation to participate in parallel with my colleagues. So, we have just entered a new political cycle in the European Union, in which the next Commission will be defining the policies and the strategy for the European Union for the next 5-10 years. In this regard, the White Paper can play a very relevant role, as it has provided an analysis of the telecom sector and the digital infrastructure, which has been defined as the foundation for European competitiveness. The white paper has been developed over—I would say—the process started over two years ago, with a previous consultation, and now, they have made a very relevant analysis of the sector, defining the actual infrastructure development situation as compared to where we would like to be and also analyzing the capabilities needed on the part of the telecom sector to reach those targets by 2030.

Then, the **White Paper proposes a solution in terms of defining a Digital Networks Act that would help to reach those targets**. Fundamentally, regarding where we are today, as my previous colleague from the European Commission stated, the situation is not very comforting. The delay in the deployment of networks in Europe, both fixed fiber¹² and also 5G¹³, especially on 3.5 gigahertz, which is actually the type that provides all the enhanced qualities and lower latency, is important. Deployment is around 41%, as compared to the target of 100% at the European by 2030. Thus, we are very far behind in terms of reaching those targets. In the time that we have remaining, it will not be very easy. However, if we compare the current situation not only to the target but also with other relevant economic regions in the world, as such the US, what we see is that we are actually now lagging, both in the deployment of fiber and in the deployment of 5G, and that situation translates directly into the quality of services that our customers are receiving. For example, download speeds in Europe are almost half of what we see in the US. That has a direct and relevant impact, and it is actually the European users, consumers, and businesses that are suffering today.

Where are we in terms of reaching these targets in 2030? The situation is not very comforting. The European telecom sector Average Revenue Per User is at around half or even a third of the level of the US for both fixed and mobile. This means that the revenues that we can generate in the European sector are quite low. This has an impact on the profitability of our networks of businesses, which is much lower than the remainder of the sector in Europe and the US. It also effects our ability to invest. Our investment levels are around €110 per capita, while in the US, the value is around double that. It's €240 per capita. If we extrapolate that up to 2030, that would mean that Europe would be further lagging behind. We will be in a much worse situation in 6 year's time. **Europe will have second-tier connectivity quality if we continue the same investment levels, and this has been reflected in the stock performance of the sector in Europe**. We compare the telecom sector in Europe's performance for the last 6 years, which has been much worse than that of the biggest companies in Europe, but not just vs. the remainder of companies in Europe but also vs. the telecom sector in the US. Thus, it's not a telecom sector problem. It's a European telecom sector problem.

Here, what it is relevant is to define the solutions. Fundamentally, the White Paper proposes a solution. For Telefonica there are two bases for implementing this solution. One is that there is a sense of urgency. We cannot wait for the reality of the Electronic Communication Code¹⁴ in 2025, and it will be adopted and implemented no earlier than 2027–2028. Thus, **we need a detonator, a proposal that is implemented quickly. In some specific cases, we might need some sort of recommendation**

¹² Find full data by country in Annex. **Figure 1**.

¹³ Find full data by country in Annex. **Figure 2**.

¹⁴ The EU Electronic Communications Code updates and merges EU telecommunications rules under one regulatory framework. For further information: <https://digital-strategy.ec.europa.eu/en/policies/eu-electronic-communications-code>

or some tools that are fast to implement. The other basis is that we need a targeted solution. **The DNA does need to address the primary concern identified in the White Paper.** We cannot define a new policy framework that fails to correctly address these problems, because this new framework will be shaping the policy framework for the telecoms for the next 10 years. If this framework doesn't get it right, we'll spend 10 years with the wrong policy framework. That would leave Europe in very bad shape. The priorities for Telefonica regarding these solutions are, first, allowing market consolidation, having sustainable infrastructure, and having sustainable investments. Fundamentally, the problem of the size of the sector and the companies, of the profitability of the companies, must be first addressed at local level, within national markets. We cannot resolve the issue if we combine two companies from different geographical markets: if we merge two companies at the European level we will have twice the problems that we have today. We must first focus in-market and allow in-market consolidation to foster sustainable markets within EU countries. Then, in the second phase, we will have pan-European consolidation leading to strong pan-European players.

I will now try to finish. Fundamentally, other issues that demand a reshaping of the regulatory framework, which needs to be updated, such as making Spectrum policy an investment lever, including the Electronic Communication Networks as an eligible taxonomy activity, and allowing the rebalancing negotiation power in the digital ecosystem so that all actors can negotiate balanced agreements. I will end here so that we can have further discussion later.

Xavier Vives

Moderator

Thank you very much. Very interesting. Alejandra, now that you are on, you have the floor.

Alejandra de Iturriaga

Director of Telecommunications and Audiovisual Sector at the Spanish National Authority for Markets and Competition (CNMC)

First, I would like to apologize because they have some connection problems, and now, I'm here. I'm happy to say that I'm very honored to be here. Thanks to the IESE for inviting me to participate in this conference, which celebrates its 5th edition this year. It's a pleasure for me to represent the telecommunications regulator at this panel, which addresses a very hot topic. As said by Gonzalo, it's the digital network and how it will redefine our telecom regulation.

Let me attempt to explain the whole situation. You have heard about this in the presentation of Przemyslaw from the Commission. This is very important as well. The truth is that since the beginning of 2023, the electronic communication sector has been having an intense debate over the actual regulatory model needed to achieve the connectivity goals set in the 2030 European agenda.

To achieve these goals across Europe, a number of needs must be met. **First, the telecommunication sector must complete high- and very-high-capacity network deployments of fixed fiber and networks in rural areas, as well as 5G mobile networks.** The good news is that Spain is doing well in this regard because it has more than 90% coverage of fiber¹⁵. However, we are also waiting for the completion of this coverage in the rural areas, and we are working on it, especially in terms of market

¹⁵ To see, in more detail, the Internet coverage in rural areas of Spain, see **Annex Figure 3**.

regulation and the market reference offer. A second goal to achieve is that **the sector must adapt to technological innovations, such as the progressive digitalization of networks** and the growing relationship between the traditional telecommunication operators and content application providers. Third, of course, **the current scenario is characterized by business concentration processes and strategic changes in the international organization of telecommunication operators**. We have had, here in Spain, a huge merger between MASMOVIL and Orange¹⁶, which was one of the most important mergers in Europe in the telecom sector. Finally, we must take into account, in this model and the new model that will be addressed by the new Commission, that there are new operators that have been operating in our sectors, such as wholesale-only operators, tour operators, and local operators as well in the Spanish market. We have recently seen how Digi has become the 4th operator in the market by becoming the beneficiary of the Orange–MASMOVIL merger, as we were saying.

Thus, to adapt this regulation to the changes taking place in the sector and continue the regulation debate this year, the **European Commission published the connectivity, digital networks, and infrastructure package**. It consists, as has been said before, on the one hand, of the **recommendation on the security and resilience of the submarine cable infrastructures** and, on the other hand, of **the proposal of the white paper** entitled How to Meet Europe's Digital Infrastructure Needs. This is in public consultation, as you know, lasting until the 30th of June.

What is the white paper? **The white paper is a reflection document that analyzes the changes that have occurred in Europe and will occur in future connectivity networks and identifies potential scenarios that would result in attracting investment in the widespread deployment of fiber and 5G, fostering innovation and helping us to achieve a true single digital market**. Indeed, the availability of high-quality, resilient, and affordable digital infrastructure is the necessary precondition for Europe to face the upcoming digital revolution, such as AI, virtual worlds, and the Internet of Things. Therefore, the European Commission's White Paper on Digital Infrastructure raises an interesting debate on the measures to be taken to move toward a more competitive, secure, and sustainable digital future, as well as further European integration. The proposal from the European Commission allows all stakeholders to reflect, together, on how to build one's own digital future by participating in this public consultation. We will serve as a basis for the review of the regulatory framework for electronic communications. As you know, the European Regulator, BEREC¹⁷ (the Body of European Regulators for Electronic Communications), is currently preparing its contribution to the public consultation in which the CNMC is actively participating. The European Commission that will be set up after the recent elections could consider all the results of this consultation when adapting the final document in this new digital network act. We'll keep an eye on developments in Europe, and we can go through this document, the white paper, during our debate. Thank you very much.

¹⁶ This merger has generated some concerns from the commission. It will create the largest operator by number of customers in Spain. To see, in more detail, the position of the Commission, check the following press release: https://ec.europa.eu/commission/presscorner/api/files/document/print/en/ip_24_928/IP_24_928_EN.pdf

¹⁷ The BEREC is the Body of European Regulators for Electronic Communications. It was established by Regulation (EU) 2018/1971 of the European Parliament and the Council of December 11, 2018.

Xavier Vives

Moderator

Thank you. Tobias, the floor is yours.

Tobias Martinez

Chairman of the European Wireless Infrastructure Association (EWIA)

Well, thank you very much. Good morning, everyone. Today, I'm here on behalf of the EWIA, which is the European Wireless Infrastructure Association. Sorry for that, but I think that this is one of the new roles in this industry, which has emerged in the last 7-8 years.

When we talk about telecom, **we have to take into consideration that we are talking about a capital-intensive sector, which is about talent and assets.** Let's keep aside, for today, talent because that is not the purpose of the session. However, when we talk about assets, we know that infrastructure itself is capital intensive, and on top of that, telecom is technology impacting the infrastructure. So, when we talk about the European single market, when we talk about these kinds of challenges, we should consider the fact that the telecom infrastructure companies are playing a key role in the telecom operators today. It's not just in Europe. It's the same in the US and everywhere.

Just to give you some **figures on the commitment of the members of the association, we have already invested almost 50 billion euros in the last 8 years—50 billion euros.** This means that we are helping the telecom operators to monetize, in the very, very attractive way, multiple existing infrastructures, which is not negligible. It's, roughly speaking, five times the current performance on the stock exchange. However, we are also committing new infrastructures for further development. Thus, we are working together in a cooperative way, not just releasing money. This involves working with the telecom operators, which are our customers, long-term customers, but also we are partnering with them, which is very important, as partnering is about sharing the new challenges of 5G rollout. I think our role will be key as a player in the telecom sector when we talk about the single European market or when we talk about the new challenges of the rollout, such as reaching rural areas. Thus, there are a great deal of challenges in front of us.

I think that the wireless technology is also providing an easier way to roll out and reach these kinds of remote areas and provide broadband because it's not just about technology. It's about connecting people and giving them opportunities in life. I mean, **5G, for me, broadband is more than just downloading or uploading data. It's access to content, which is education, which is about corporate development and business development in rural areas.** Maybe, it's a different kind of challenge, but I'm just trying to give you the idea that our cities are becoming bigger and bigger and bigger and bigger and bigger and bigger. **We are facing new challenges in the big cities regarding pollution and a lack of opportunities. This is about internal migration also. So, I think that broadband telecom services could be helpful in fixing population in the land.** I would like to offer just a few words about the membership of the EWIA, which consists of about nine members operating in 16 European countries. Again, we are allocating 50 billion Euros for further development, monetizing the existing infrastructure, and attempting to avoid the duplication of existing infrastructure. **We have to improve our efficiency.** We cannot build 2, 3 and 4 networks by country, doesn't work.

I think that the principle is very easy. It's economies of scale, so it's efficiency. It's sharing the existing infrastructure. We are improving the operational cost, we are reducing the operational cost, and we are

reducing the CapEx¹⁸ requirements. The challenge is as Gonzalo said. We'll see, for sure. It's enormous. It's a question of, maybe, a few hundred billion euros. We are competing in this world with the East and the West, so our competitors are running very fast. It's not enough to allocate a lot of money. We must run at least at the same speed as our competitors. Having said that, for us, it is very important, as long-term investors, to understand the regulations, and what does it mean to understand something? It means predictability. Otherwise, the private sector will not be allocating billions and billions of euros in Europe. **We need certainty for telecom operators about power costs, and we are capital intensive again. Thus, a long-term view is a must. This is about 20–30 years' return.** Sometimes, when you are evaluating 30 times, 25 times in BTE¹⁹, this means 25 years of return. Twenty-five years in telecom is like a century, maybe, in car manufacturing. This is my view, so this is no time to merely compete. **It's time to cooperate not just among telecom operators, such as TowerCos²⁰, but also with regulators.** It is time to explain to them that we are facing many challenges together and that we must work together in order to provide certainty, attract new investors, and keep existing ones because the challenge is enormous. If we fail, the failure will be dramatic. I mean, the gap is huge when you consider the Eastern and Western Europe. However, Eastern Europe is also becoming bigger and bigger.

Again, so at least on the part of the Telecom Infrastructure Association, I want to underline our commitment to further cooperating with our customers, which are the telecom operators, and working with regulators.

¹⁸ Capital expenditure: these are funds used by a company to acquire, upgrade, and maintain physical assets such as property, plants, buildings, technology, or equipment.

¹⁹ Book-to-market ratio.

²⁰ Tower companies are an industry sector that consists of building, owning, and managing wireless communication infrastructure.

Xavier Vives

Moderator

Thank you very much. Maarit.

Maarit Paloviirta

Senior Director for Regulatory Affairs, Connect Europe (Formerly known as European Telecommunications Network Operators' Association (ETNO))

Thank you very much. Thank you for the organizers for their kind invitation.

Many things have been said. I'm not going to spend so much time on analysis. Instead, let me just introduce myself. I'm representing ETNO. ETNO is the European Telecoms Association, as it was already mentioned.

We have about 30 to 35 members at the moment, and they represent about 75 to 80% of all the telecom investments in Europe²¹. This is quite a substantial part of the investment, and ETNO can be referred to as the large telcom association. Today, our membership includes both former incumbents and challengers because the markets in Europe are already mixed. **We no longer have true national markets anymore.** However, many of the companies who are encompassed, perhaps, in their national markets are now competing against other big companies in other markets. Thus, it's already a quite a large change in the picture when one is simply talking about the DNA (Digital Networks Act). I think this is a bit of a working title at the moment in Brussels concerning what the future of regulation for the digital infrastructure should or could be.

We are very welcome in this discussion in general. I think that many of the drivers for the updates to the current telecom regulatory framework have already been mentioned. There are the technological changes, so convergence and cloud, and what this brings to and means for our industry, which implies some market developments. It is an opportunity for telecom operators but also a risk in a sense that the opening and the convergence of the networks, of course, opens the networks for new non-traditional players. We have the hyper-scalers, we have vendors, we have municipalities, and we have different types of software providers who can, in the future, provide services based on the network. Thus, the landscape is changing. I also agree with Tobias that we shouldn't ignore the global picture, because global competitiveness is important for Europe and, ultimately, also for European citizens. Just to quote some numbers, this is from the European Commission communication of last year, I think. The EU share of global ICT markets²² has fallen by 10% between 2013 and 2022, so in general, we are not in a great shape when we think about remaining relevant and solid within Europe but also being able to compete globally.

These are the reasons we think that we should have an urgent update for the telecom or digital infrastructure regulatory framework in the EU. We shouldn't, of course, forget that the ultimate beneficiary of all of this is the end-user. It is the European citizen, the consumer, and also, European businesses. Whether it's SMEs or large companies, they will be the ones to benefit from this level of performance. Hopefully, the future holds performance fiber and 5G networks and cloud infrastructure, as well as networks that are sustainable and secure. All of this means that **we must invest. We also need to innovate. I think that's the major concern now for operators about how to create this policy framing that would enable European players to be relevant** in this new development, just to mention some headlines. What do we see as the key levers in this, what we hope will be a regulatory paradigm shift that will enable us to be more competitive in global markets? I think Gonzalo mentioned them already, but I'll try to highlight the industry perspective a bit.

²¹ For more detailed information about ETNO members' investment, see the following report: <https://etno.eu/library/reports/117-state-of-digital-2024.html>

²² For more insights into the EU ICT (Information and Communication Technologies) markets, follow the link to the Rolling Plan for ICT Standardization 2023: <https://joinup.ec.europa.eu/collection/rolling-plan-ict-standardisation/rolling-plan-2023>

First, to tackle the concept of scale, we very much agree. **We now need a clear action plan regarding how to do this.** We know that there is no consensus at the moment, but we do need an action plan. There's no way around it. For us, this means that we must discuss market scale. Consider how M&A, at the national level, could have an impact. We are not advocating becoming the United States in terms of a policy model. We are simply saying that as Enrico Letta²³ said in his report today, we have more than 100 operators. That's why we should, consider how can we arrive at a slightly more balanced framing here. There is a great deal of room between the current European state and where US markets are.

The second very important pillar on the scale is the **harmonization of rules.** Whether it's a question of access regulation and its enforcement, whether it's spectrum policy, whether it's taxation, whether it's consumer policy, we see that there is a great deal of room to harmonize and actually have rules that would be less sector specific, more horizontal, and thus make the European market a little more European for operators.

Let us consider regulation, specifically future regulation and even deregulation. I think there's room for that as well. We are very much supporting the European Commission in the kind of initial vision that was laid out in the white paper, which holds that we should be moving away from the ex ante rules being the dominant way forward and toward the ex post regime, reserving regulation for those very specific exceptional circumstances in which there would be a long-term bottleneck situation for example in, rural or remote areas.

Spectrum policy is very important and was also raised by our moderator. We know that this is a touchy topic in terms of the Member States, but of course, we would like to see more progress in that respect. **Spectrum availability is key to our sector completing 5G, as well as moving toward 6G²⁴.** Then, there are the spectrum auctions and frequency allocation that we see happening. I mean, we do see that there's room to improve there. It's a very fragmented picture in terms of the member states, but we do see that best practices and trying to find some common ground regarding how to execute those would be beneficial.

Then, the fourth pillar is a level playing field for everybody. As we have said, the connectivity ecosystem is becoming more open through software etc. **New players are coming in. We welcome that. We welcome innovation and competition, but we should ensure that we have the same rules for all those players, who are effectively delivering the same or comparable services in this ecosystem.** Again, I think that the white paper offers some ideas there, and we very much welcome the further exploration of those ideas as we go forward.

To conclude, yes, we need the DNA, the Digital Networks Act, and we hope that it comes soon. We also hear that there is a little bit of regulatory fatigue in Brussels at the moment. If we could have a very lean and simplified framework that brings in all these elements together, that would be very welcome on our side. Thank you.

²³ Enrico Letta provides a report on the single market entitled "Much more than a market – Speed, Security, Solidarity, Empowering the Single Market to deliver a sustainable future and prosperity for all EU Citizens." Access it here: <https://www.consilium.europa.eu/media/ny3j24sm/much-more-than-a-market-report-by-enrico-letta.pdf>

²⁴ To see the currently overview of development of the 6G in Europe, check the following link: <https://digital-strategy.ec.europa.eu/en/news/6g-research-gets-eu130-million-eu-funding-boost-europe>

Xavier Vives

Moderator

Thank you very much. Ignacio, you have the final word for the moment.

Ignacio Vela

Manager for Government Affairs and Public Policy, Google

Okay, first, thank you to IESE Business School for running this event and Cellnex for sponsoring it. I very much like that the title of this roundtable is “Redefining the DNA of our telecom regulation.” I think we should ask ourselves why we want to redefine the DNA and whether doing so will improve it. I think we are all in agreement. I like it very much. There was a comment that Tobias made concerning how **this is not only about establishing Internet connections. It is about connecting people, businesses, public institutions, and a whole ecosystem.** It’s more about people than physical things. I think we should aim to have a long-term ecosystem that has established benefits for everyone at Google. We believe in the power of the Internet and technology to be used for good. Telecom regulators are major enablers in this regard. Users rely on strong, affordable connectivity to access internet applications, digital services, and AI. That’s key for the digital economy. Without users, we will not reach anyone in this single digital market. Recently, there has been talk about these digital decade targets and, in particular, the Gigabyte connectivity target. Right? That should be a reality for Europeans. However, what we see is that this intermediate objective of better connectivity should be viewed in a broader way. I think that what we want to achieve and the purpose of this changing of the regulation should be a long-term goal, that is, establishing the digital decade and thus fostering sustainable economic and social benefits across Europe through digital transformation.

We think this is an achievable target, and we will share some measures that we believe could be applied to accomplish this. Then, I will mention the measures that we do not agree with. The first, as has already been said, is removing regulatory barriers. You mentioned it, Xavier. Ultimately, **we cannot have 27 telecom markets. We need just one telecom market. The former way is not beneficial for companies, users, or businesses.** Also, the revolution or the new revolution of technology creates great opportunities. Now, it’s possible, with technology, to offer services in another country, without the need to deploy a network in that country. That’s perfectly feasible, and I think that benefits the users and the businesses also. I think we should aim to have pan-European services. This should be the focus, rather than paying European operators, but that requires the removal of regulatory barriers.

The second, which has already been mentioned, is **reducing operational costs**, and yes, steps to reduce the operational cost of a network are very interesting. These steps will allow us to improve returns on investment and lower prices for consumers. Regarding the Legality Infrastructure Act²⁵—I think we have a specific section on this, on this relation practical way—I think we should further develop that.

The third is **improving rules for the spectrum**. I think it’s feasible and helpful to make the regulatory spectrum much easier than it is. For example, **there could be better coordination between regulatory authorities.** Here, we include the radio spectrum policy group, the BEREC, and also the national

²⁵ The Legality of Infrastructure Act is based on regulation (EU) 2024/1309, which “aims to strengthen and harmonize rights and obligations applicable across the Union to accelerate the roll-out of VHCNs and cross-sector coordination, including backbone and next-generation wireless high-speed networks with performance at least equivalent to that of 5G”.

(Available here: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=OJ:L_202401309).

Also, the European Commission Recommendation (EU) 2020/1307 was intended to reduce operational costs.

(Available in: <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32020H1307>)

regulatory authorities. Also, **establishing regulatory mechanisms for the institutional spectrum** is a good idea in order to reduce costs. Also, you already mentioned the spectrum allocation process. I think we should be used to boost connectivity and encourage code investment. For example, we could allocate revenues from the spectrum actions to the developing of network infrastructure and only to that. I think that should be an objective, and we'll certainly help to develop infrastructure.

Having said this, I think in the white paper includes very interesting measures, but some of them, I think, do not contribute to the purpose we mentioned before: fostering economic and social benefits across Europe and expanding the scope of the European telecom framework. The white paper argues for an extension of this regulation based on a complex converted ecosystem. I think we do not believe that's a good idea.

The first reflection is that, very logically, if we expand the scope of regulation, that would mean that industrial companies, private network operators, content providers, and banks could fall under the scope of telecom regulation. This would **mean a massive increase in the regulatory burden, which includes the cost and how to enter the telecom system**. The second reflection concerns whether this is justified or not. We think that the idea of a level playing field, due to the convergence between digital service and telecom providers, is, at best, an arguable one. **Digital services, such as cloud computing, are not replacing telecom services; rather, the two complement one another**. This evolution is less about convergence and more about, and I quote the language of the white paper, the coordinated management of computing and network resources. From our point of view, regulating the entire digital ecosystem as telecom operators because telecom operators use digital services makes as much sense as regulating everyone like an electricity company because they use electricity in their operations.

The second measure that we are concerned about, the dispute resolution mechanism, I believe has already been discussed in the exploratory consultation. It's kind of a disguised telco tax. Of course, our contribution was discussed during the exploratory consultation, and it's simply giving another name to a discarded idea. I think the entire sector was against this idea, and we should not include this in the debate again. That's the conclusion of the European Commission, and we welcome the public consultation of the White Paper. I think it's a great opportunity to provide opinions and that all the ideas intended to change telecom regulation for the better are more than welcome, but we should try to avoid ideas that are detrimental to the entire ecosystem.

Xavier Vives

Moderator

Thank you very much. I think we are keeping time appropriately. Before giving the floor, I would like to put some questions to the panel for quick answers. Then, we can open it up to the audience. I would like to start with Alejandra. The question I would like to pose is that as, for example, Gonzalo, but also other participants have mentioned the need for the consolidation of the operators and, in particular, maybe even starting within the national borders, how do you see the issue from the point of view of the regulator and also the potential tension between this need for consolidation and maintaining a competitive market?

Alejandra Iturriaga

Director of Telecommunications and Audiovisual Sector at the Spanish National Authority for Markets and Competition (CNMC)

Yeah, of course. Well, I don't know. I haven't been clear. I didn't say that I am proposing to promote business concentration processes. I'm saying that this is one thing that is happening currently. We have seen happiness with the merger between MASMOVIL and Orange. That's a huge merger that has affected and will affect our telephone market, especially the broadband market because there is and will be a new operator, which is very strong, very important in the deployment of fiber and given its agreements with other operators in any case. I only was saying that this is one thing that is happening and that the white paper addresses that. **One of the objectives of the white paper on the new regulation should be to achieve the necessary competitiveness on the part of the European economy through various measures.** One could be this merger and concentration. That is what I was trying to say. I mean, if this is objective, of course, we are willing to do that. As you know, I am a telecom director, I'm not the competition director. However, we are within a convergent regulator, CNMC, and every merger is analyzed in a case-by-case basis. Thus, we have to take into account the regulator of telecoms, the regulator of competition, and the pros and cons of each merger. Of course, there will be attention paid to what you have mentioned, but we must understand that investment is needed, as has been already said by Gonzalo, Ignacio, Maarit, Tobias, and everyone else. Investment is needed to deploy and then walk. The European telecom sector is lagging. Thus, one of the solutions that is addressed by the white paper is the merger and concentration procedures, and Spain is an example in this regard. Of course, CNMC has not analyzed this merger. That has been done by a commission, as you know perfectly well. However, we agree with that merger and the remedies imposed on the DG by the European Commission DigComp²⁶.

In conclusion, we'll have to balance the benefits of our merger against the challenges that it will pose, especially regarding the increase in prices in our market. We believe that the new operator created by the merger of Orange and MASMOVIL will benefit our end-user, which is our objective, and that there will be no price increases based on the merger. We must analyze these situations on a case-by-case basis, and general rules are not applicable. Thank you.

²⁶ The Digital Competence Framework for Citizen. DigComp has provided a common understanding, across the EU and beyond, of what digital competence is, and therefore, it has provided a basis for framing digital skills policy, which is focused on five areas/competences: information and data literacy, communication and collaboration, digital content creation, safety, and problem solving. (Last document of DigComp available: <https://publications.jrc.ec.europa.eu/repository/handle/JRC128415>)

Xavier Vives

Moderator

Thank you very much. Gonzalo, if I understand correctly—otherwise, you tell me—expanding fixed broadband coverage is not really lagging. Why do you think this has happened? Why has this happened in Spain and not in other European countries? One thing—and this is a parenthesis—in your exposition, you draw many comparisons with the US. Whenever I go to the US, I never see that they have better mobile or broadband than what we have in Spain.

Gonzalo López-Barajas

Director of Corporate Regulation, Telefonica

I agree with you that in **Spain we have very high-quality networks, both fixed and mobile, and in the case of fiber, it is one of the leading countries not only in Europe but in the world.** We are probably more advanced if you compared us to the US. However, if you travel to Germany, you travel to the UK, you travel to other countries, you will see that our position in Spain within Europe is exceptional, but we have a very different picture in the rest of Europe. For example, in Germany, regarding fiber development, I think it's actually in around 20% of households²⁷. It's a completely different picture. Germany is one of the biggest countries, and it's probably one of the engines of the European Union. We have very different situations within Europe, and that's the one that we want to address. In Spain, by the time we decided to invest in fiber, there was a regulatory framework in which, actually, for broadband services above a certain bandwidth, we were not regulated, and we did not have to provide wholesale services. That's when we sped up the deployment of fiber, and for 2 years, we were seeing the very strong development of fiber. Then, there was a regulatory change in Spain, and we were forced to provide wholesale and active broadband services on our fiber, and the picture changed completely. Those 2 years provided us with a good timeframe in which to develop fiber. Also it's relevant that in Spain, we also have ducts that were already deployed. That's a different situation than in the other countries in Europe²⁸. Thus, the deployment of fiber is much easier and cheaper than in other countries. In fact, we do not only have fiber from Telefonica. We will also have fiber for different players that have been using these ducts. The environment in Spain overall is good for fiber deployment. We have many places now with as many as three or, in some cases, four overlapping fibre networks. However, **the situation in the whole of Europe is completely different. That is why we want the white paper and the Digital Network Act to be addressed.**

²⁷ To see the evolution of fiber's development in Germany, consult **Annex Figure 4**.

²⁸ According to the 2021 Broadband Coverage in Europe 2021 Final Report, Spain, in general, outperform the EU average. For further information and access to the report see the following link: <https://ec.europa.eu/newsroom/dae/redirection/document/88314>: pp 170-174.

Xavier Vives

Moderator

Thank you. Tobias, could you expand on how your neutral host model can help integrate the digital market in Europe specifically?

Tobias Martínez

Chairman of the European Wireless Infrastructure Association (EWIA)

Well, the aim of the neutral host approach is a B2B model²⁹ in which we are providing access to all of the players in every country, in every sector. This is not simply about telecom operators, even though are the main users of the existing infrastructure and will remain so in the future. It also concerns public administration, new players, wireless services, and the IoT and, sometimes, emergency services as well. We are trying, first of all, to **maximize the usage of the existing infrastructure because I believe that, maybe, one failure of the auctions of the spectrum was to duplicate or even multiply by three, sometimes, the existing infrastructure.** Sometimes, if you are driving, you could say three towers nearby, 5–10 meters apart sometimes, and this is the reason why we are trying to duplicate in the future. We are trying to perform an additional duplication of new infrastructures, and then, maybe, we could dismantle the existing ones is a much better way.

We are also partnering mainly with the telecom operators in order to maximize the use of future infrastructures, which is very important in identifying the priorities in dealing with public administration. Again, with the telecom operators trying to avoid duplications during the CapEx allocation but also connecting the existing wireless infrastructures with fixed assets such as optical fiber because optical fiber is a must on the 5G networks, this is not just about wireless infrastructures or bandwidth or fixed bandwidth. We have to combine both. We must provide latency, and therefore, it's about edge computing or distributed data centers.

The complexity of the new kind of services regarding 5G merits the **better use of the existing infrastructure and better cooperation on the part of the existing players.** Therefore, these two actions are the only way to accelerate the rollout and provide services to vertical healthcare manufacturing—otherwise, it is impossible to simply connect people—is to set these infrastructures for the sake of the productivity of European industry, which is competing with the East and West. Again, the complexity of 5G, of the challenges of 5G, is not just about technology. It's completely different from the challenges of 4G. It is a must to speed up, a must. There is no way to delay or find new obstacles in terms of administrative permits. This is just a very simple issue, not rocket science. Thus, we must speed up the rollout. We must reduce costs, and the DNA must become the NGA, as well as being among our tools. We should, again, simplify and speed up the framework in order to reach our goals. We cannot fail.

²⁹ For further information about the “neutral” host approach in the EWIA vision, see the following report: <https://ewia.org/wp-content/uploads/2021-01-18-EWIA-Narrative-SCREEN.pdf>

Xavier Vives

Moderator

Very good. Thank you very much. Maarit, you mentioned the need to deregulate, phase out regulations, and exempt some telecoms from relying more heavily on exposed regulation. **My impression is that we are going in the opposite direction.** This may be a wish, but if we look—and I think Google can also speak to that— at the DMA³⁰, the Digital Market Act, the Digital Service Act³¹, it goes exactly towards regulation and minimizing ex post control. How do you use it? I would be surprised if, in a related sector such as digital markets, we are going in one direction, and in the digital network, we are going in another. What's your view on that? Maybe the European Commission can also say something on that topic.

Maarit Palovirta

Senior Director for Regulatory Affairs, Connect Europe (formerly known as European Telecommunications Network Operators' Association, ETNO)

I think the circumstances are very different. The **telecom sector, as you know, has faced decades of heavy regulatory burden. The number of regulated markets officially today, as defined by the European Commission, is two, and it has gone down from, I think, eighteen markets some years ago. There has already been a deregulatory trend, let's say.** However, now, at the same time, what has happened in the market? I mean, we came from a monopoly situation. These were state-owned companies, and the governments decided to pursue liberalization of the sector as the markets evolved. Liberalization has happened, and we have very competitive European markets, not only vertically integrated operators but also wholesale-only players. We have all kinds of operators in Europe today. We believe that the markets are competitive. In some cases, they are even hyper competitive. The sector-specific regulation concerning our sector is still too heavy a burden when you consider the markets and the state of competition. I think that we need a kind of psychological switch in terms of how we try to assess competitiveness and competition in the markets because today, we are focusing very heavily on wholesale offers. It's this kind of pro entrant. I think Enrico Letta called it, "pro entrant regulation," which has been very much focused on the wholesale level. Instead, we should focus on the end-user.

I mean, isn't the endgame of connectivity to provide the best possible connectivity to the end-user? Should it not be the retail market that we look at first to assess whether the market is competitive and whether there is competition? Should it not be that we look at whether, in any country, do we have enough operators? Do we have enough offers? It's not only about the number of operators but also whether we have different types of offers from different types of players. If the answer is "Yes, we do, we have different price packages, different kinds of things," then why should we regulate?

There's no reason for that. I think that is the kind of switch that hasn't yet happened. I think that that's something that we would like to see happen. Then, we have the level playing field discussion. We have new players entering the traditional telecom markets. I think that's a separate discussion because telecom operators are still nationally based. New players are often global companies. It's a very different situation when you start assessing the competition, competitiveness. Then, you know whether there's a significant power in the market or not. It's a totally different scale and assessment.

³⁰ The DMA or Digital Market Act is the EU's law intended to make the markets in the digital sector fairer and more contestable. The DMA entered into force on November 1, 2022, and become applicable on May 2, 2023. For further information of the DMA click the following link: https://ec.europa.eu/commission/presscorner/detail/en/ip_22_6423

³¹ The DSA or Digital Service Act regulates online intermediaries and platforms such as marketplaces, social networks, content-sharing platforms, app stores, and online travel and accommodation platforms. For more insights into the DSA, click the following link: https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/europe-fit-digital-age/digital-services-act_en

That's a separate exercise that we need to consider. However, overall, we are not advocating for heavy regulation for anybody. I think that we are industry players and that we understand that the burden of regulatory red tape is not something that generally helps anybody. However, we need to find a balance.

Xavier Vives

Moderator

Thank you. I am tempted to put the same question to you. How do you see this balance between ex ante regulation versus ex post control, as well as the connections between the infrastructure and services, for example?

Ignacio Vela

Manager for Government Affairs and Public Policy, Google

That's a good question. We should be working to support and cooperate with one another, and other companies are different. We understand that. I am a former telecom regulatory lawyer, so **I suffered under the regulation of the seventeen markets for many years. I know the situation, but the circumstances are different, as are the services.** That's what we must consider. We cannot talk about extending the scope of the telecom regulatory network and the telecom regulatory framework too, as well as digital services, and assume that digital services will not be regulated. I think that if you ask Commissioner Terry Barton, that's no longer applicable. You mentioned the DNA, DSA, and DMA. We can also mention NIS2.³² We can mention DORA³³ for financial services, which supplies technology services, and we provide them with official intelligence, according to the Artificial Intelligence Act³⁴. We are no longer in an environment that is not regulated. I think that we should also consider that balance and the extension of regulation to another sector. We do not believe this is the best idea if we are talking about removing regulation for the same sector.

Regarding the services we provide, the idea of the forced contribution or the TelecoTax thing has been discarded many times. This is not the first time that we have had this debate. I think that the assumption that digital services are providing our telecom networks is no longer valid. We have a mutually interdependent ecosystem. I think that benefits all. If there's an imbalance, there are mechanisms, not regulatory mechanism, that we can use to address it. When we talk about how services reach the user, we use telecom networks. However, telecom networks also have the benefit of us providing services for those networks. Nobody hires an internet connection for the blinding lights of the router. We simply hire it to access Internet content and to provide digital services for many things. At the same time, if users do not have internet connections, companies like Google cannot reach them. That mutually beneficial ecosystem is something to preserve and not to tamper with. Also, the conflicts regarding IP interconnection have been very few in all these years, and the white paper doesn't even recognize that.

³² NIS2 stands for the Network and Information Security Directive. The NIS2 Directive is a continuation and expansion of the previous EU cybersecurity directive, the NIS. It was proposed by the European Commission to build upon and rectify the deficiencies of the original NIS directive. Member States have until October 17, 2024, to transpose the Directive into national law. For further details and directive affects, explore the website of the Directive: <https://nis2directive.eu/digital-infrastructure/>.

³³ DORA stands for the Digital Operational Resilience Act. DORA aims to strengthen the information and communication technology (ICT) security of financial entities. It is an EU regulation that entered into force on January 16, 2023, and will apply as of January 17, 2025. For further details on the Regulation, click the following link: <https://www.esma.europa.eu/esmas-activities/digital-finance-and-innovation/digital-operational-resilience-act-dora>

³⁴ The Artificial Intelligence Act is a regulation approved by the council on May 21, 2024, and it will enter into force in May of 2026. The regulation aims to foster the development and uptake of safe and trustworthy AI systems across the EU's single market by both private and public actors. At the same time, it aims to ensure respect for the fundamental rights of EU citizens and stimulate investment and innovation regarding artificial intelligence in Europe. For more information about the process, click the following link: <https://www.europarl.europa.eu/topics/en/article/20230601STO93804/eu-ai-act-first-regulation-on-artificial-intelligence>

Xavier Vives

Moderator

Very good. Thank you. We have a few minutes. If any of you would like to speak, please do.

Przemyslaw Kordasiewicz

European Commission

I do remember when, in 2002, the first framework was being adopted and proposed by the Commission. It was almost a quarter of a century ago. The commissioner, Mario Monti, who was, at that time, the commissioner for competition, said that the telecom sector could not yet(then) be fully left to the ex post/competition law controls. Now, the question is, after this quarter of a century, is this sector there yet? I think we have observed that **the number of regulated markets has decreased significantly, from 18 to two**. Also, what we see in very recent years is that even in those two markets, which remain regulated, in many member states, they are not really fully regulated. I mean, we observe the geographical delineation of markets, in which competition has developed in such a way that ex-ante rules can be completely lifted. I think this idea is also behind the white paper's proposals. Lifting ex ante regulation does not actually mean that there will be the wild west. First of all, **there is the exp-post control, which can also be very effective. Secondly, we also intend to maintain the safety net, which is the ex-ante regulation if the three criteria are met in the case of persistent bottlenecks.**

Thank you.

Xavier Vives

Moderator

Thank you very much. This has been a very good clarification. Thank you very much to all the participants. I think this has been extremely interesting.

Introduction

“The Gigabit Infrastructure Act’s path to 2030”



Hannele Lahti³⁵

DG CONNECT, European Commission

The Gigabit Infrastructure Act,³⁶ (GIA) entered into force in May 2024. The rules will apply from November of next year, in 2025. Some rules will apply some months later, in February and May of 2026. BCRD, the Broadband Cost Reduction Directive³⁷, rules, remain applicable until the corresponding GIA provisions apply, that is, mostly until November of next year. There was also a small editorial corrigendum on the BCRD repeal date.

Structure of the GIA can be divided into four different sections or pillars and a horizontal section. The first part of the act is about **access to physical infrastructure**. Access is about permission to use the infrastructure to deploy very high-capacity networks. There are also rules on transparency regarding this physical infrastructure. “Transparency,” refers to information available about this infrastructure.

The second section of the act focuses on rules on **civil works** and, more specifically on, the coordination of civil works, so construction carried out together. These rules on civil works apply in general when the works are publicly financed. In this section, there are also rules on the availability of information on civil works. The next section is on **permit granting**, speeding up permitting. Finally, we have rules on **in-building a physical infrastructure** which are about fiber in the buildings and the infrastructure to support it, and we also have rules on access to this physical infrastructure.

The horizontal rules (**Definitions, Digitalization, Dispute settlement, Competent bodies, Penalties Report and Monitoring, Repeal of BCRD**) apply to most of the sections mentioned. The Gigabit Infrastructure Act also includes the rules on intra-EU communications. These amend the Regulation on open Internet access.

Access to the physical infrastructure includes provisions on **getting permissions to use infrastructure to deploy fiber and 5G** very high capacity networks. **This has a direct impact on cost reduction for deployment because the rolling out of physical infrastructure can represent a significant part of the cost of deploying.**

Access provisions are also about commercial negotiations between undertakings. Operators can request access, to deploy elements of very high-capacity networks, or associated facilities. When the request is reasonable, access should be granted on fair, reasonable terms and conditions, including price. When access is granted by public sector bodies that own or control infrastructure, access must be also granted on non-discriminatory conditions.

The GIA introduced several changes as compared to the BCRD rules. One important change is that the **regulation also includes tower companies, including independent tower companies within its scope**. Thus, they also have the right to benefit from access to physical infrastructure and faster permitting. Access rules in GIA give the right of access to operators. However, the scope of the obligation to provide access goes beyond, by including utilities and public sector bodies. The public sector bodies are among those entities that are subject to the obligation to give access, and they must also follow non-discriminatory access conditions

³⁵ Ms. Lahti spoke in a personal capacity. The views expressed were purely those of the speaker and do not necessarily reflect the views of the European Commission.

³⁶ The GIA is a political agreement reached in February of 2024. In April 2024, regulation (EU) 2024/1309 was published. The GIA is part of the EU's strategy: 2030 Digital Decade. Access the regulation by clicking the following link: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=OJ:L_202401309

³⁷ The BCRD is a directive that is part of the “Digital Agenda” strategy, and it was the result of the Conclusion of the European Council in December 2012. The directive was published in May 2014. Those interested can access the directive here: <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32014L0061>

When there's a reasonable request for access, it should be met with fair, reasonable terms, including prices. The criteria is in Article 3. According to GIA, Commission may, in close cooperation with BEREC, provide guidance on the application of Article 3. It is possible to refuse access; these cases are detailed in the article. For example, safety and public health issues. Furthermore, physical infrastructure subject to access obligations under the European Telecommunications Code³⁸, or resulting from the application of Union State aid rules are not subject to all access provisions to avoid duplication.

There are also new rules that concern legal persons who are primarily active as tenants or holders of rights over land, other than property rights. The requirement to negotiate in good faith concerns both land aggregators and operators. There is also an obligation to inform NRAs about the conclusions of agreements regarding land. Member States may also provide further guidance on these terms and conditions for these agreements. There's an option for Member States to rule on access to private commercial buildings.

The GIA lays down the right to negotiate agreements in order for two entities to conduct civil works to deploy VHCN networks. The obligation to coordinate concerns the publicly financed works of public sector bodies and network operators. There are certain conditions under which there is an obligation to coordinate, and under such circumstances, Member States may specify further detailed administrative aspects regarding this. There are also a number of exemptions, to which these coordination obligations may not apply. Member States may identify, under certain criteria, the types of civil works that could be exempt from the obligation to coordinate. This is important for national critical infrastructure as well as civil works which are limited in scope.

BEREC is issuing guidelines on the application of this article on coordination of civil works, and the deadline for the BEREC guidelines is in November next year.

Permitting is also addressed in the GIA regulation. Permitting procedures can take a lot of time and can be costly. The GIA rules now lay out that operators can apply for permits electronically via a SIP (single information point).

Another important aspect of speeding up permitting is that there are 20 days in which the competent authorities can decide on the completeness of the application. If the competent authorities require any missing information, this must be requested within the 20 days. There are four months to grant or refuse permits. If needed, in specific circumstances, there is a possibility of extensions. However, if there's no decision in four months, the permits, other than rights of way, are tacitly granted. Member States can derogate from tacit approval if there are other remedies available, and these can be either compensation for damages or referring the case to court or a supervising authority.

If these derogations are used, then there is a possibility to ask for a conciliatory meeting in order to speed up the permitting procedure. In addition, **GIA provides that certain deployments of very high-capacity networks or related works for which permits should not be required, and Member States will specify them. These concern repair, maintenance, certain types of works, or limited upgrades.**

On the in-building provisions of the GIA regulation: the in-building of physical infrastructure and the access points are to be fiber ready and there's an obligation to provide in-building fiber wiring. These obligations concern buildings that are newly constructed or undergoing major renovation works.

³⁸ The European Telecommunications Code is a directive that creates a legal framework to ensure the freedom to provide electronic communications networks and services. It was published in 2018. To access the directive, click the following link: <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32018L1972>

There are some exceptions, to which these rules would not apply, including where compliance is disproportionate. Member States are to adopt standards and specifications and ensure compliance. The fiber-ready label for the compliant buildings is a voluntary option. There will be also BEREC guidelines on access to in-building infrastructure. Issuing these guidelines has the same deadline as the guidelines on civil works: November of next year.

Roundtable 2:

**Streamlining network deployment:
The Gigabit Infrastructure Act's path to
2030**



Moderator:

Iñigo Herguera

Department of Economic Analysis and Quantitative Economics, Universidad Complutense de Madrid

Hannele, thank you very much for your presentation. Let me ask you to stay put so that later, you can also be involved in the discussion if it's possible for you. Now, we will turn toward the panelists who are here present physically, and we will start with Aurelie Bladocha from Vantage Towers. May I say, "Vodafone"? You will explain, please. Also, Vantage, in terms of the role it has, is it a tower company or part of a tower company? What are the pros and cons of the Gigabyte Infrastructure Act.

Aurelie Bladocha

Head of European Affairs, Vantage Towers

Thank you very much. I have slides if it's possible to show them. Thank you very much. Thank you for the invitation to say a few words on behalf of V Towers. For those who are not familiar with the company, Vantage Towers was created in 2020 as part of a spin-off of Vodafone. We have a footprint over 10 countries, and we have more than 84,000 thousand sites. The neutral host model and the tower business model were explained at length in the previous panel, so I will not go into detail on this. What I just want to say on this subject is that, yes, we really believe in the neutral host model because we feel that it reduces the cost of rollout for telecom operators. It fosters competition, and it has a positive impact on climate change. This is something we believe in, and that's why we are open to having as many operators as possible on our towers. When I say "operators," I also mean other types of stakeholders, which are the verticals, and particularly railway companies and transport companies. Because we also have a very strong focus on 5G, on 5G corridors, which will result in deploying connectivity for the major transport paths in Europe. We believe that this is one of the key issues contributing to the creation of a digital single market.

On the Gigabit Infrastructure Act, there are indeed many things to say, but I have chosen to focus on four issues. The first is that a **faster permit process enables faster deployment**. This may seem obvious, and I wish that I could agree. However, this is not as simple as it seems because the authorities have four months to reply. We know from the experience of the BCRD that it is not that simple. We were really hoping that there would be tacit approval, which would be harmonized. We have learned, thanks to the presentation of Hannele, that there is, in theory, a tacit approval of permits after four months. However, in reality, the **Member States can derogate**. As a pan-European company, of course, this situation is very difficult. When you have different regimes in different countries, harmonization is a crucial point.

This is the last point of the presentation. TowerCo will now be subject to fair and reasonable obligations when they must provide access to their infrastructure. We **will derive some benefit from being within the scope of the regulation**, and we also face some burdens because of it. I had chats with many people now present in this room during the negotiation of the GIA. You know that we were not happy to be subject to a regulatory burden in the absence of a market failure. However, this is the state of play now. We are satisfied with the GIA in terms of the way safeguards were built in, especially for tower companies, because the specific business model of tower companies is recognized. It is recognized in the GIA for its fair and reasonable terms. **Thus, existing contracts can be used as a benchmark to define those fair and reasonable prices**, which we think is extremely important and there is also a reference to avoiding excessive prices. So, contract prices should be market based, which we feel is the best way to evaluate or to discuss these fair and reasonable prices.

The third point concerns land aggregation³⁹. To explain very simply, as a tower company unit, to build a tower, you first need land. To get land, you discuss the situation with the landowner. Sometimes, it's a farmer. Sometimes, it's a forest owner. However, what is important is that you will rent access to the land so that you can build your tower. **There is now a practice that is called land aggregation, and it consists of the land aggregator becoming an intermediary in the relationship between the tower company and the land owner.** Regarding this relationship, ultimately, the consequence is that the price of the rent will increase. To give you an idea, in Spain, for example, as the result of land aggregation, **the price of our rent, on average, increased by 168%.** This is really one of the key priorities that we have, **and we are very positive about the fact that this practice was recognized in the GIA.** Land aggregators will have to negotiate in good faith regarding the price of access to the land. However, we believe that it will be very important that this is followed up by the full recognition, in EU legislation, that this practice also needs to follow the principle of fair and reasonable prices.

The last point that I wanted to mention is that **harmonization is crucial.** We need a harmonized framework. **It's really an issue if, at the end of this year's process, we have to deal with 27 different regimes because of the 27 Member States.** We are a pan-European company. We want to contribute to building and deploying 5G connectivity⁴⁰. However, the easier the framework is, the easier the rules are for us to navigate. Then, we can focus on speeding up the deployment rather than talking about rules. For this, we believe that the guidelines from the European Commission and the BEREC will be extremely important. Thank you.

Iñigo Herguera

Moderator

Thank you so much. That was a pretty clear presentation. Now, we have Ana Urban from Cellnex. Cellnex is—you can correct me—a completely independent tower company and one of the novelties, if this is correct, of the Gigabit Infrastructure Act in that it is within the scope of a network operator company, as well any kind of tower company. This is new, and on this subject, there will be questions. Now, the floor is yours for 5 to 8 minutes, Ana.

Ana Urban

Regulatory, Cellnex

Thank you Iñigo, and thank you to the organizers for inviting us. First, I want to return to some ideas from the previous roundtable, specifically that the European Union has set ambitious targets for digital connectivity as part of its 2030 digital goals. **To achieve these goals, we need investments, the harmonization of regulation, and to avoid overregulation, and for this, the policymakers introduced the Gigabit Infrastructure Act. This is a review of the former BCRD that is aimed at streamlining the deployment of very high-capacity networks by 1.) simplifying procedures and 2.) encouraging the shared use of infrastructure. Sharing infrastructure is what Cellnex does. The GIA is a key strategic initiative to achieve these Digital Decade targets, so it should help ensure the EU does not lag behind in the global digital race.** Thus, it should be a framework that facilitates deployment and guarantees long-term investments, rather than creating additional challenges. Therefore, if the GIA serves to increase unnecessary regulation and further complicate rollout, in our view, it would be a step back for Europe.

³⁹ The land aggregation is addressed by the GIA in Articles 3.2, 3.12, 3.13, and 11.5.

⁴⁰ Check Annex **Figure 5** to see the number of 5G stations in EU members states.

To turn to the GIA, I would tackle some points made by my colleague previously. First, I would like to address the scope, the fair and reasonable access conditions, and the simplification of procedures. First, regarding the scope, one of the key changes with respect to the previous broadband cost reduction directive, as Iñigo previously said, is that the **GIA expands the scope of application by broadening the definition of network operator to include tower companies and public infrastructures, including public infrastructure from public bodies, which is a good point for us.**

Tower companies are now included in the GIA, entailing both rights and obligations, particularly the obligation to grant access. However, in our opinion, this obligation was not necessary, because infrastructure sharing is central to our business model; access provision is Cellnex's DNA. Therefore, as long as any obligations to be imposed, these are reasonable, and do not create additional challenges that could jeopardize long-term investments, no issues are foreseen regarding their implementation.

Additionally, the GIA states that this access must be given under fair and reasonable conditions. First, it is important to mention that no access conflicts with independent tower companies have been reported thus far. In our opinion, this lack of conflict suggests that setting terms and pricing through regulatory intervention is totally unnecessary, as competitive market dynamics have already ensured fair access. Again, zero access conflicts with independent towercos. For this reason, we believe that the GIA should complement, rather than replace, commercial negotiation in these cases because these negotiations usually lead to efficient outcomes.

Additionally, we believe it is important that when developing the guidance for the implementation of this article, to be done by the European Commission, **the European Commission should be mindful of the importance of maintaining proportionality in all regulatory measures. Otherwise, the GIA and its guidelines on fair and reasonable conditions could end up blocking investment decisions, putting the digital target goals at risk.**

Finally, on this point—and I totally agree with my colleague who spoke earlier—streamlining procedures, in particular the acceleration of permit granting, is really important. As Hannele also mentioned, this is a key topic for the European Commission. However, we want to emphasize that it's important that Member States are aware that they must enforce these measures because in terms of practicality, there are some countries that have favorable frameworks, even more than the one mentioned in the GIA, but these are not enforced. It's not about how we put it on paper. It's about how we enforce it on Member States. With this in mind, we are optimistic that the GIA will be more successful than the BCRD⁴¹, which had, as mentioned, limited impact and was just used in a few countries like Italy and Spain. However, after talking with our colleagues in other countries, we've seen early signs that show potential in Denmark and Sweden, which is good news for us. To conclude, if we want every part of Europe to be well connected, the challenge is massive, and any help for investment is needed.

The **GIA should support, not hinder, the investments needed to fill the gap. However, its success in reducing cost versus adding an additional burden will depend on the effectiveness of its implementation at the national level.** This is where the development of the guidelines, as well as the collaboration of stakeholders, becomes essential. The active involvement of all active players, policymakers, national regulatory authorities, telecom operators, and tower companies is crucial in developing detailed guidelines that will ensure smooth national application. As always, Cellnex is happy to collaborate further. Thank you.

⁴¹ The European Commission, during the 2020–2021 period, developed a report to evaluate the Broadband Cost Reduction Directive. It is available via the following link:

<https://digital-strategy.ec.europa.eu/en/library/broadband-cost-reduction-directive-summary-report-consultation-its-review>

Iñigo Herguera

Moderator

Thank you very much, everybody. That was a clear presentation. Now, we have a different competitor, which is Orange, specifically Christian Hacker from Orange. He will also talk about—we would like to know also if you are a vertically integrated operator TOTEM⁴² has been created. What situation are you talking about? Thank you, Christian.

Christian Hacker

Competition and Market Analysis Director, MASORANGE

Thank you very much. I would like to thank the organization for this opportunity to share my opinions as part of this roundtable. First, I would like to present the company because MASORANGE is a result of the recent merger between Orange Spain and MASMOVIL, which were the two main competitors to Telefonica in the Spanish market. We are the major alternative operator in terms of rolling out networks. We have connected 17,500,000 building units through optical fiber, and we have almost complete coverage in 4G and 80% coverage in 5G as I speak. Speaking after the infrastructure operators, I can give you the complementary perspective of a network operator, which is a user of the infrastructure and not so much a provider of this infrastructure. I have three points on that. First, the **Gigabit Infrastructure Act has been largely anticipated by the Spanish Telecommunication Law⁴³ and the real decree of 330⁴⁴ most of their provisions were already embedded in the Spanish legal and regulatory framework.** For us, the **GIA is not a big change.** It is different **for infrastructure operators, for whom it is big news as for example it will limit the abuses of land aggregators.** However, for us, the **problem is in the field because the regulatory context** is good but it is not sufficiently implemented. I will give you some examples.

As a first example, there are many situations in which we need a multicity of licenses from various administrations. For example, when we need to deploy fiber within a municipality, crossing a road and crossing a river, you need a license from all of them. There is the license from the general traffic direction, a license from the hydrographic confederation, and even a license from the environmental administration when dealing with national parks. The basic issue is that **there is no central coordination for this and all the deployment is suspended until the obtention of the ultimate license. The process can last many months.**

There are also many delays in becoming getting licenses for energy cable drops. In this case, it is the energy company which is negotiating the license, and the energy company does not place more priority on lighting up an entire municipality than providing the energy for a single residential customer. We will also need licenses for poles renewal, as we are rolling out poles in rural areas. Here, we depend totally on Telefonica, which has its own agenda, which can conflict with the municipality, while it would be better to find a collective agreement to bury the cables. I have to add that **many municipalities still ignore the law and require systematically a license instead of a responsible declaration** or forbid fiber deployment through building facades (what we usually do in Spain) not even talking about historical protected town centers, which have been very complicated for all. Finally, some municipalities simply do not accept any new operators, as in the city of Valencia. This was for fiber. The situation is worse for mobile, as

⁴² TOTEM is an orange's subsidiary managing mobile towers and leasing telecom infrastructure to other operators.

⁴³ Ley 11/2022, of June 28, General Telecommunications Law. Available in Spanish via the following link: <https://www.boe.es/buscar/act.php?id=BOE-A-2022-10757>

⁴⁴ Real Decreto 330/2016, of September 9, on measures to reduce the cost of deploying high-speed electronic communications networks. Available in Spanish via the following link: https://www.boe.es/diario_boe/txt.php?id=BOE-A-2016-8429

the central administration has been less specific than for fiber and the municipality has a great deal of flexibility to refuse the installation of new antennas or not provide information on the available site.

There are conflicts. They take a very long time to solve, and one can become desperate to obtain a solution, as we've seen recently with the General Direction of Traffic, which denied access to its ducts in spite of a contrary decision of the CNMC (the domestic regulator). So far for us, the devil is in the field, it affects us even more that we are in a phase when our deployment occurs in much less profitable areas, where we have much higher costs and much lower take-up.

Second point I would like to develop is that the GIA affects only some infrastructure and does not apply to infrastructure regulated as a remedy based on the electronic communication code. I think **it is crucial to understand the difference for the sake of preserving competition at the level of networks and services**. All operators in Spain are using Telefonica-regulated ducts and poles for deploying fiber networks. The infrastructure of Telefonica is unique and totally unreplicable⁴⁵. Thus, the duct network of Telefonica has a perfect topology for operators that want to connect all central offices to all final customer buildings. It has a great deal of available space, even more now given the copper withdrawal. It is in very good shape, and the prices are cost oriented and under the supervision of the CNMC. These prices are the basis of all fiber operator business plans. Very simply, no viable alternative to this network exists due to inadequate technology, lack of capacity, lack of continuity on the part of the infrastructure, restrictive conditions, and very high prices. Telefonica's ducts and pole are an essential facility that absolutely meets the three-criteria test and must remain regulated as an asymmetrical remedy.

I will very briefly comment on the last point, as it has been taken up this morning: the GIA brings solutions for quiet a limited part of an operator's life. **Structurally, operators in Europe are suffering from declining revenues, high investment, insufficient profitability, and a strong increase in traffic, which requires continuous investment to increase capacity. This is very costly.** This issue is quite critical, as 50% of network capacity is used by large traffic generators, which are the Internet giants, and those companies are not paying the price for the service provided by telecommunication operators. Telecommunication markets are now two-sided markets, like many other markets, and one side of the market should not be paying for a service that is used by both sides. Thank you very much.

Iñigo Herguera

Moderator

Thank you very much, Christian. In nine minutes, you were able to list a lot of problems in Spain regarding deployment and other things that we'll be talking later about. Now, another novelty of the Digital Infrastructure Act is the fact that any public body will be within the scope of the regulation and have the obligation to grant access to physical infrastructures. Thus, it becomes some kind of network operator, as well as a specifically public body. Here, we can really appreciate the fact that David Ferrer is here, in part, from Generalitat, so he can explain the situation a bit better. He will describe what this obligation means and whether we can go tomorrow and ask you for streetlights opening, right? Okay, thank you.

⁴⁵ For more insights into the Spanish case, see this Telefonica article: <https://www.telefonica.com/en/communication-room/blog/why-spain-is-a-case-study-for-super-fast-broadband/>

David Ferrer

Strategic Advisor, Centre de Telecomunicacions i Tecnologies de la Informació de la Generalitat de Catalunya

Thank you, Iñigo. As you mentioned, we are a public body, but I feel like a free rider because we are a public body, in this case a Catalan regional government, but we don't have competence in telecommunication. I tried to explain what we've done in Catalonia on this matter. Let me thank you. I would like to thank, on behalf of the Secretary of Digital Policies and Telecommunications, Marc Real for inviting us to explain our experience in this matter.

I would like to begin my intervention with quick look back to understand what we will focus on regarding the kind of tools we have in Spain. In this case, in order to guarantee access to or the deployment of high-speed networks, we have three tools. I think everyone knows them: **ORLA**⁴⁶ (Leased Lines Reference Offer), **NEBA**⁴⁷ (New Broadband Ethernet Service), and **MARCo**⁴⁸ (Wholesale Access to Registers and Ducts Offer). These three tools are for radio communications, and there is another regulated tool, which is **ORAC**⁴⁹ (Reference Offer for Access to Cellnex's Broadcasting Centres). ORAC is focused on regulation law in Cellnex's offer in this case. However, I would like to focus my presentation on these two instruments, for which I think that we have needed the operators. There are two scenarios in which we can boost the deployment of very high-speed networks. The first is using ORLA. In this case, the one operator who wants to deploy his network can hire the capacity to reach a given geographic zone in which he wants to deploy an FTTH solution or rent or hire an FTTH network. The second is using MARCo. However, when using MARCo, it's on the passive side. That's appropriate if using passive elements is needed to target a given area. It's more expensive than ORLA.

Let me focus on ORLA. From our perspective, ORLA is a good instrument, but it can be better. Why? **ORLA is built around two important variables: one is its distance variable, and the other is its capacity.**

How many customers and operators must cover the cost of using, in this case, active services based on hydro resources, plus FTTH deployment costs, and have a minimum output when using, for example, deployment in rural areas? In rural areas, we must typically pay a plus-35-kilometers tariff. As you can see in the image, if we take a 1-GB drive, it's a very expensive tariff in order to cover in a rural deployment solution. In this case, with the ORLA scenario in rural areas, for example, in Catalonia, 15% of Catalan municipalities account for 70% of Catalonia's inhabitants, and Catalonia has 947 municipalities. A huge number of municipalities are rural. When an operator wants to deploy or roll out his network, typically they choose this kind of instrument.

Administrations must guarantee a territorial balance and equal opportunities. In fact, without public support, it is economically unviable for operators to reach rural areas. **Public intervention in these cases is only justified when there is market failure, specifically a lack of coverage based on an uncompetitive supply.** This was the reason the Generalitat of Catalonia promoted a set of public policies that I want to share with this slide. What has the Catalan Government done, and what is it still doing? I would like to highlight some of the initiatives, for example, the CAI project. In the early of 2000s we awarded Tradia⁵⁰ a long-term contract, a 30-year contract, to manage and operate the Generalitat of Catalonia's network radio towers. Some of you may not be aware about this, but this was the site of a great project led by Tobias Martinez, which culminated in Cellnex, and another one called "Catalunya Connecta", or Catalonia connected, which started in 2007. We built 120 towers to increase

⁴⁶ Original document of ORLA available in Spanish via the following link: <https://www.cnmc.es/sites/default/files/5401435.pdf>

⁴⁷ Original document of NEBA available in Spanish via the following link: https://www.cnmc.es/sites/default/files/editor_contenidos/Telecomunicaciones/Ofertas/NEBA/Texto_NEBA_vigente_.pdf

⁴⁸ Folder of documents relative to MARCo available in Spanish via the following link: https://www.cnmc.es/sites/default/files/editor_contenidos/Telecomunicaciones/Ofertas/Marco/Oferta_MARCo_vigente.zip

⁴⁹ Original document of ORAC available in Spanish via the following link: https://www.cnmc.es/sites/default/files/editor_contenidos/Telecomunicaciones/Ofertas/ORAC/ORAC_2024.pdf

⁵⁰ Tradia was company responsible for managing and operating the Generalitat de Catalunya's radio towers.

the territorial coverage of radio communication services. With 15 radio towers, we can cover 80% of the population in Catalonia, and to go from 80% to 91% coverage, we need more than 414 towers. This is a good example of a territorial balance issue that can be solved by public administration, I think.

The other is “Xarxa Oberta de Catalunya”⁵¹, or the Catalonia Open Network. It’s a project launched in 2010 with the approval of the European Commission, and it’s aimed at providing general data on Catalonia’s telecommunication network based on fiberoptics, in this case, and connected with an important number of administrative sites. Additionally, these instruments make the excess capacity of this network available to the wholesale market with the criteria of neutrality, transparency, and homogeneity and facilitate the deployment of each network and service for telco operators. Finally, in 2019, we promoted new investment to increase the footprint of our network municipalities for all.

In this slide, we show the instruments that have been enhancing the value of these infrastructures and facilitating access to all of them for operators. For example, the rooftop government agreement is an example I would like to mention in particular because it has not yielded the expected results. I am referring to the government expectation, but I think that this tool is aimed at facilitating the installation of a base station or small areas of 6G, which will excite the Generalitat. However, unfortunately, the politicians did not make use of them in practice, so I think that it could be interesting. Of course, I would like to mention the public prices that we reached in terms of a passive infrastructure. I mean direction and ducts for fiber and the single information point, which we began in 2019.

Let me share some figures on the impact of these policies in terms of the network footprint, the municipalities covered, and the population covered. However, I think it is important to talk about not only the population that we cover but also the territory that we cover. In this case, we would like to cover all the municipalities of Catalonia. This is our tower network, most of which is concessioned to Cellnex and, ultimately, connected with wholesale services. I would like to show you the total number of services and the total number of operators that are using this public infrastructure and this network. We discuss the 109 operators that use our fixed network. Most of them are managed by “Xarxa oberta de Catalunya,” and the others are managed through the public prize and in TowerCo solutions. We have also a many corporators using this infrastructure. Thank you very much.

Iñigo Herguera

Moderator

Now, we have the opportunity to discuss the issues or to offer any kind of questions or comments to the panelists, including from the floor. I would invite anyone who has any kind of question or issue to debate to raise it.

⁵¹ See **Annex Figure 6** to view the deployment of fiber in Catalonia. For access to the specific project, check the program website: <https://www.xarxaoberta.cat/>

Questions and considerations from the audience



Questions and considerations from the audience:

Juan Velazquez

Tower Company

Some considerations that more or less overlap with what Hannele has said about the Gigabit Act. First, I would like to highlight that the TowerCo and the infrastructure operators are fully legitimate given that we are operators. We are subject to the code of communications. However, **most of the countries, when they transpose the code, they consider the TowerCo and the infrastructure companies to be part of a different regime. Certain guarantees for the deployment of the rollout that were granted to the communications operator were not conceived for the infrastructure communication operators.** That is, in my view, the first and most wonderful effect of the Gigabit Act.

Second, we, as actors, have several problems regarding the TowerCo operators finding spots, that is, finding new spots and preserving their ancient spots. Communities and property owners are not so satisfied with having antennas on their properties. Thus, finding new spots is a problem. When the Gigabit Act is introduced into the market, many spots will be assigned by public administrations, who cannot deny them except for certain reasons. The installation of the towers or the antennas will become easier, which matches Christian's observations regarding the gap between legislative acts and reality.

A certain limit must be placed on land aggregators. I would like not to be offensive, but land aggregation is a form of speculative activity that appears in the middle of the telecom market and introduces no value for anyone. Land aggregators must be, in certain way, regulated, and they cannot impose unreasonable prices. It's a wonderful modification of the Gigabit Act. The fact is, if I could criticize the act a little, that the Gigabit Act, this regulation, this regalement, is more like a directive that a regalement.

There are at least 40 calls to the national state to regulate certain points. Like my colleagues, I rely on the BEREC and the European Union to increase the effectivity of the Gigabit Act, the permits, and temporary limits. My point is, exactly as Christian Hacker has said, the entire distance that exists between the legislative act and the reality is important. For some municipalities, even there are articles in the law that ignore this distance or attempt to invoke other legal figures that are not considered for this market. However, in general, the valuation of the Gigabit task is highly positive, and we expect the cooperation of all the actors to implement—that is a word that we normally use for directives, in this case for the regulation—to ease the deployment, the roll out, and to facilitate the use of new technologies via real estate. Thank you so much.

Iñigo Herguera

Moderator

Thank you. Thank you very much for your intervention. Are there any further questions or comments that you want to make? If not, Hannele, now that we have you here, I would like to ask a question on you online, which concerns two unrelated things. On the one hand, you rebuilt the BCRD of 2014 with this Gigabyte Infrastructure Act. Why didn't it work based on the analysis made by the European Commission and based on some of the comments here? Then, to address another issue, maybe it's not that conflictive, but the Gigabyte Infrastructure Act addresses in terms of pricing and what fair and reasonable conditions are. There seems to be a huge scope for anything, and I guess, correct me if I'm wrong, that you will publish some kind of guidelines at some date, together with the BEREC, on what fair and reasonable terms are. Do you have anything that you can put forward on this, or is it correct that you know you will be publishing some kind of guidelines? Do you expect many conflicts in this regard or maybe none?

Hannele Lahti

DG CONNECT, European Commission

On why we reviewed the BCRD: **BCRD was a directive, and a great deal of flexibility was provided for Member States in terms of transposing the directive. Thus, the harmonization did not become, as strong as would have needed to be to have been beneficial.**, There was also delayed entry into application for some of the BCRD provisions. A regulation was to address the shortcomings of the BCRD. **With the regulation, we hope to achieve a high level of harmonization across the EU, as well as more efficient implementation and enforcement.**

Iñigo Herguera

Moderator

Thank you, Hannele. Thank you so much. Please, we will take any further comments now that we have here. There are three different types of operators before us, and it's time to ask them how they see the implementation. There was a small thing that you probably noticed in the program: initially, there was the intention to bring someone here from the Spanish Ministry of Telecom Economy. At the very last moment, they couldn't come. We wanted to have someone talking about the implementation of this regulation of course, but it was not possible at the last minute. Any further comments that you would like to make or questions you would like to ask are welcome.

Sylvia Ticau

DG CONNECT, European Commission

On the questions and comments made on the implementation and enforcement of the existing rules: the **GIA, as compared with the BCRD, shortens the timeframe for dispute settlement.** Also, **the default procedure for permits is now tacit approval** and GIA provides situations in which a Member State could derogate from tacit approval procedure, in particular if the Member States ensure that operators can seek remedies before a supervisory body or courts and/or could claim for compensation for damages. In such cases, upon expiry of the four months default deadline for permit granting, the applicant is invited to a conciliation meeting to facilitate the adoption of a decision on the permit application. A report of that meeting will be issued, including indicating to the operator a date when a decision on the permit application could be issued.

The GIA is a minimum harmonization regulation. However, there are several provisions based on maximum harmonization, which relate mostly to exemptions. For example, the Member States cannot extend the list of exemptions.

Barcelona has a very good single information point: a cross-sectoral platform that involves all network operators, utilities, electrical companies, telecom operators and municipalities, which began to work in the 1990s as a public-private partnership. EGIOS is used for geographical information, and the platform deals with the permits and the coordination of civil works. **The Gigabit Infrastructure Act gives Member States 24 months to adapt their single information points and have single national digital entry points** through which all relevant information and permit granting services can be accessed. **The Gigabit Infrastructure Act allow the Member States to extend this period with maximum 12 months in the case of very small municipalities (with fewer than 3,500 inhabitants).**

Iñigo Herguera

Moderator

Thank you very much for your comments and your compliments to Barcelona's single information point. Now, before time runs out, I would like to ask you to participate please.

Aurelie Bladocha

Head of European Affairs, Vantage Towers

Maybe, I will make just one point on fair and reasonable terms because this is what actually matters a great deal in terms of dispute resolution. During the negotiation of the GIA, there were some discussions of whether it should be cost oriented or not, as well as the methodology that should be applied. I heard fair and reasonable terms mentioned by the European Commission. Thus, I wanted to highlight the fact that **in our view, fair and reasonable doesn't mean cost orientation. The notion of "fair and reasonable" is intended to resemble market dynamics on the basis of existing contracts, which should be used as benchmarks because the consequence or, rather, the benefit of this is that it provides regulatory certainty to the market players**, which is what we need.

The second benefit is that it removes many burdens on the regulators, who would otherwise have to develop very burdensome, costly methodologies. We should not forget that a cost orientation normally appears in the context of opening up the market when there is a dominant operator, which has a cost advantage over the other players. This is normally the context that we have. That's why, in this area, we really believe that fair and reasonable should not be seen as referring to cost orientation but, rather, to the guidelines or interpretations that the regulators will have to make in order to provide some guidance that will not hamper investment but, rather, boost investment and foster innovation.

Iñigo Herguera

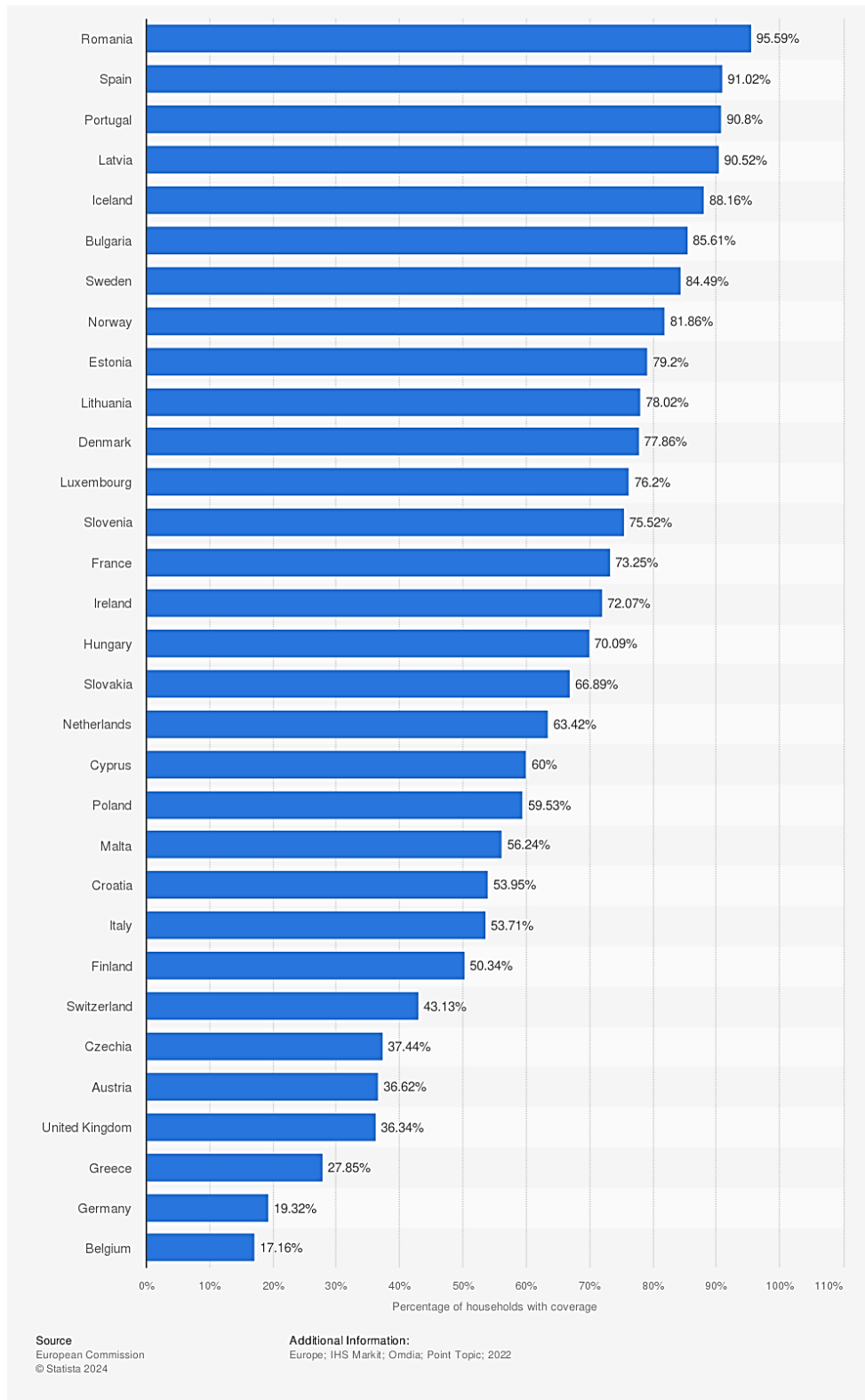
Moderator

Anything further? Is there a last, last, last, very last question? No more questions? Okay, now we have a cocktail. First, let me thank Alicia, Stefania, and all the organizers and, very specially, all of you who participated here. Thank you so much.

Annex

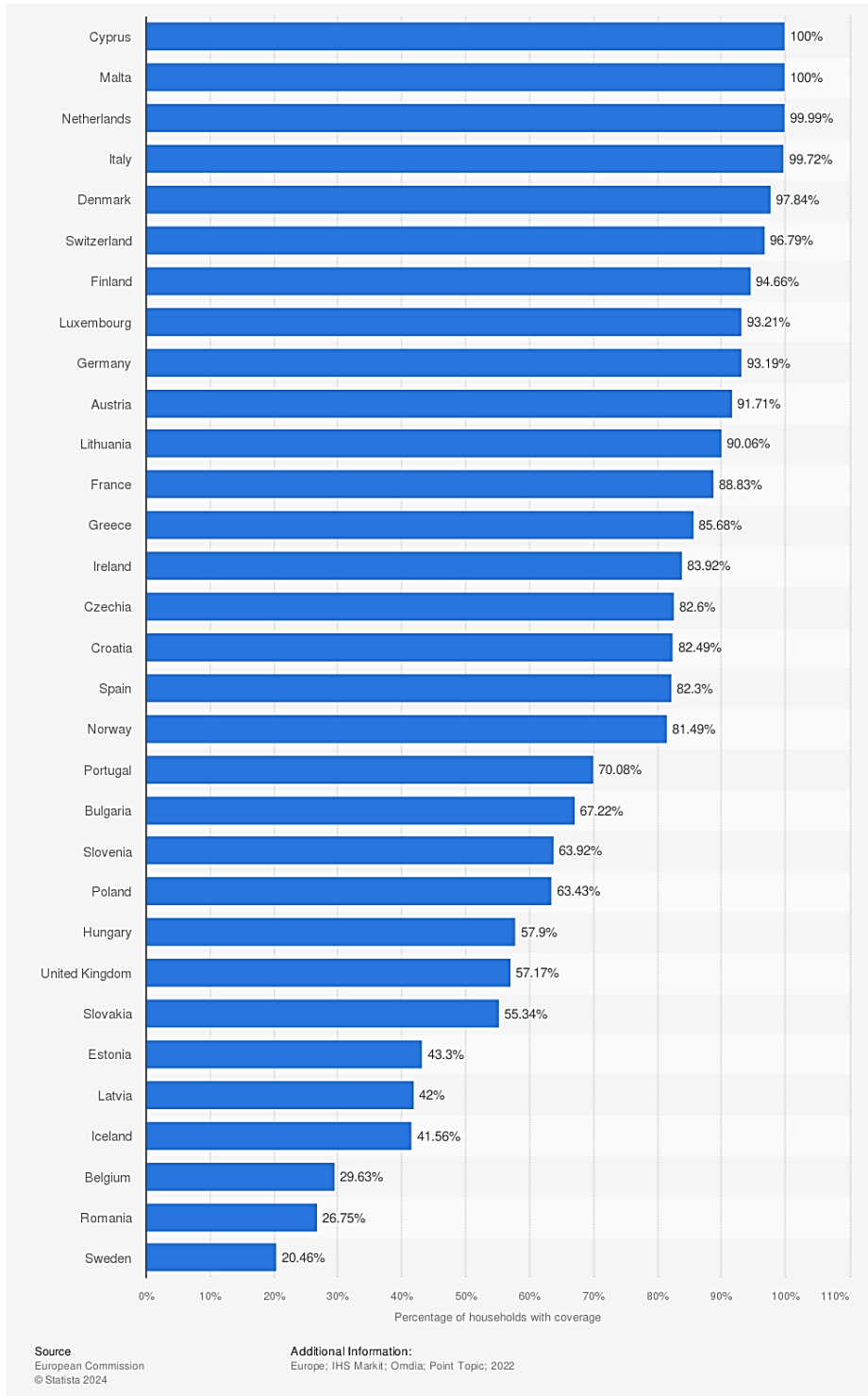


Figure 1. Fiber to the premises (FTTP) coverage in selected European countries in 2022



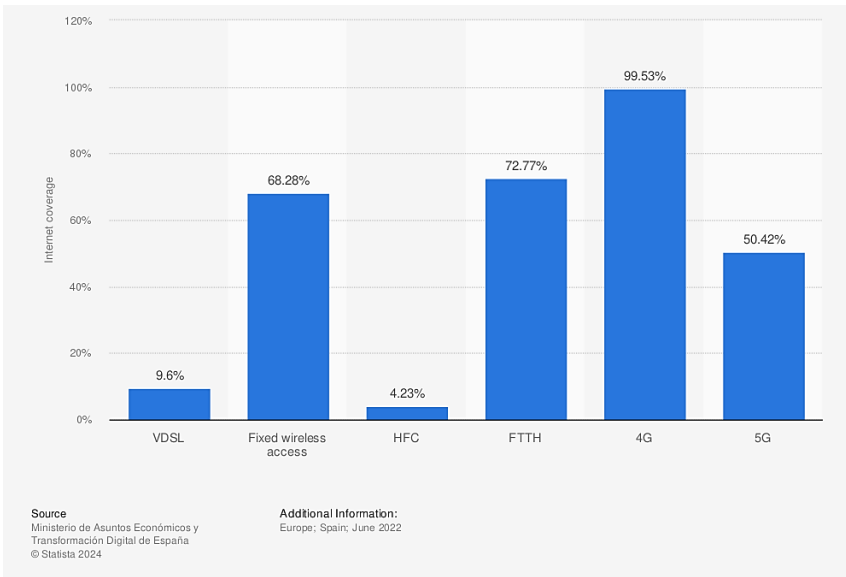
Source: Published by Petroc Taylor, January 17, 2024.
<https://www.statista.com/statistics/1387064/europe-ftp-coverage-by-country/>

Figure 2. 5G coverage in selected European countries in 2022



Source: Published by Petroc Taylor, January 17, 2024.
<https://www.statista.com/statistics/1383936/europe-5g-coverage-by-country/>

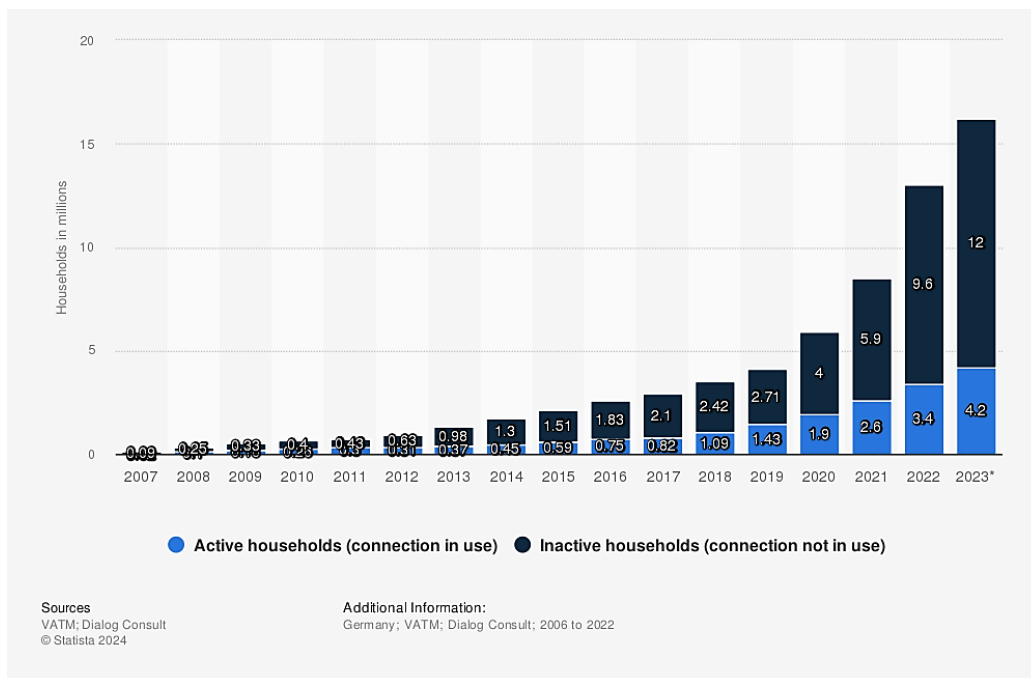
Figure 3. Internet coverage in rural areas of Spain 2022, by technology



Source: Alexandra Borgeaud, July 27, 2023.

<https://www.statista.com/statistics/747838/internet-coverage-in-rural-areas-of-spain-by-technology/#:~:text=Jul%2027%2C%202023%20As%20of%20June%202022%2C%20Internet,followed%20by%20FTTH%20networks%20with%2072.77%20percent%20coverage>

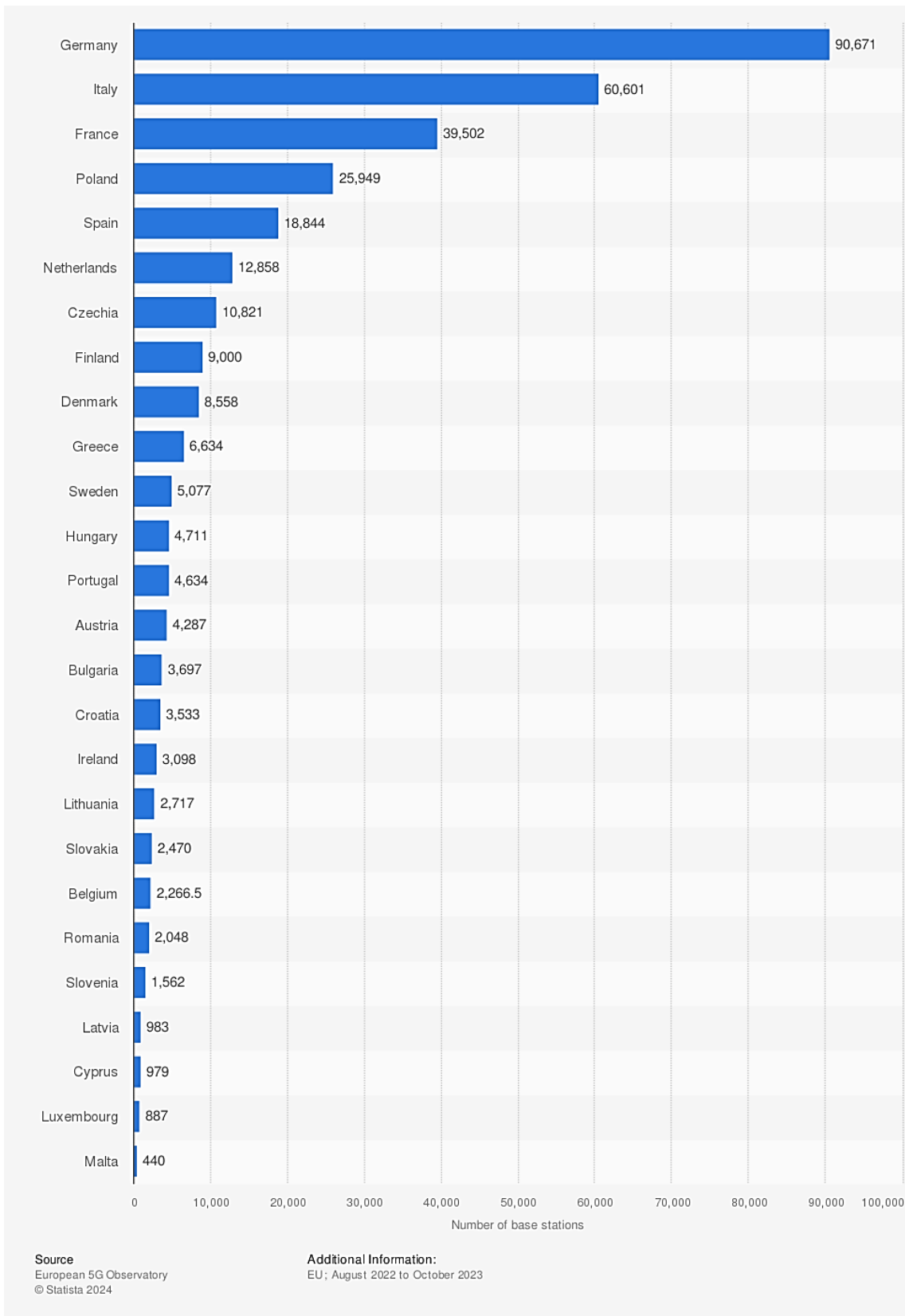
Figure 4. Number of households with (active or inactive) access to the optical fibre cable network (FTTH/B) in Germany from 2007 to 2023 (in millions)



Source: Kasia Davies, January 23, 2024.

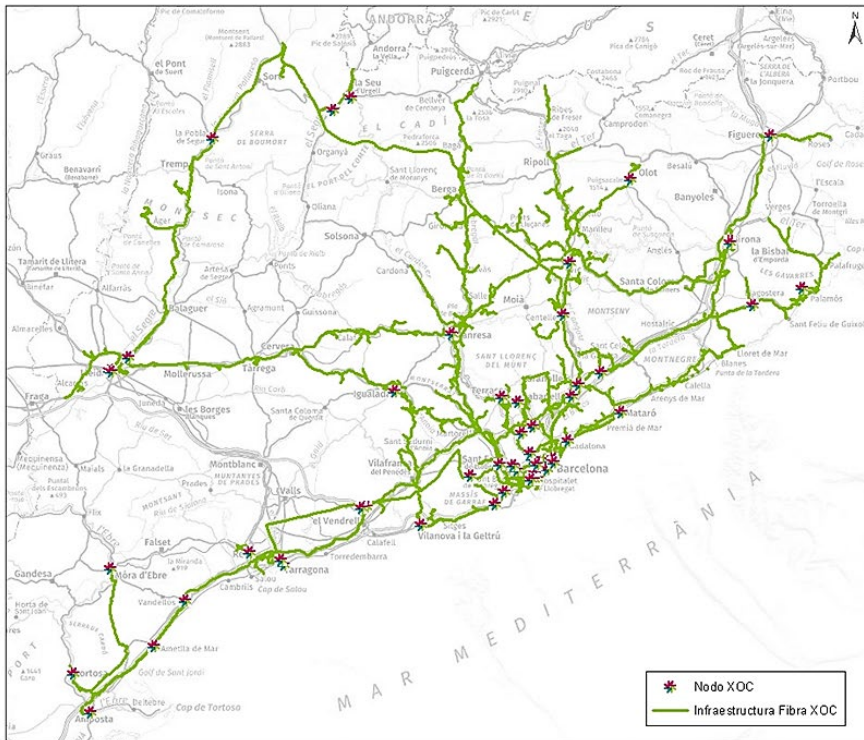
<https://www.statista.com/statistics/469139/fibre-optic-connections-households-with-access-germany/#:~:text=In%202022%2C%20around%203.4%20million%20households%20were%20connected,actively%20used%20that%20connection%20to%20access%20the%20internet>

Figure 5. Number of 5G base stations in European Union (EU) countries 2023



Source: Statista Research Department, May 14, 2024.
<https://www.statista.com/statistics/1427492/number-of-5g-base-stations-in-eu-countries/>

Figure 6. Xarxa Oberta de Catalunya



Source: Xarxa Oberta de Catalunya.
<https://www.xarxaoberta.cat/>.

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