



# Workshop Report - Study on the evolution of the competition dynamics of tower and access infrastructure companies not directly providing retail services



5 October 2023

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## Introduction

On 20 June 2023 from 10h-14h30, BEREC and WIK-Consult held a workshop at the IRG building in Brussels (Rue de la Science 14A, 1040 Brussels, Belgium).

The aim of the workshop was to collect stakeholders' views for the **BEREC study on the** evolution of the competition dynamics of tower and access infrastructure companies not directly providing retail services<sup>1</sup>. This study has been commissioned to WIK-Consult by BEREC. The main objectives of the workshop were:

- (i) to explore how and why infrastructure companies have been formed, their future plans and faced challenges
- (ii) to understand the structure of the companies, their business model, expected profitability and their access offers, and
- (iii) to analyse the implications for competition and investment in fixed and mobile very high-capacity networks.

The workshop concluded with a discussion around the implications of the rise of infrastructure companies for regulation under the EU Electronic Communications Code, BCRD and forthcoming Gigabit Infrastructure Act.

The workshop was held in hybrid format. Around 30 participants attended it in person including the majority of the speakers, representatives from certain NRAs, representatives from the BEREC Office and WIK Consult study team, as well as a single representative from each of the trade associations invited (ECTA, ETNO, EWIA, FTTH Council Europe, GIGAEurope, and GSMA). The other speakers as well as other external interested parties attended the conference via Webex. A total of around 200 participants took part virtually, reflecting the perceived importance of the topic and interest by stakeholders in the programme and speakers.

## Workshop proceedings

The workshop started with introductory remarks by IIsa Godlovitch (WIK Consult) and the Market and Economic Analysis (MEA) Working Group co-chairs Iulia Zaim-Grigore and Jordi Canadell. Iulia Zaim-Grigore and Jordi Canadell highlighted the objectives of the workshop. Thereafter, IIsa Godlovitch presented the objectives and methodology of the study that WIK-Consult was preparing for BEREC, with particular emphasis on the study timing and opportunities for stakeholder engagement.

The workshop was divided into three sessions (see the agenda in the annex) and the main discussions are presented below:

<sup>&</sup>lt;sup>1</sup> See BEREC WP 2023 – item 1.2. - https://www.berec.europa.eu/en/document-categories/berec/berec-strategiesand-work-programmes/berec-work-programme-2023

#### Session 1: The rise of the towercos - Trends in mobile infrastructure outsourcing

The first session was chaired by Christian Hocepied (University of Namur) and involved presentations from companies with different towerco business models (Cellnex, Vantage Towers and INWIT), as well as examining the perspective of telecom operators divesting infrastructure and/or seeking access to towerco facilities (1&1 and Telefonica).

- Jaume Pujol introduced CELLNEX as a neutral, wholesale and independent infrastructure provider that started its operations in Spain and subsequently expanded to other EU member states. He noted that Cellnex operates and maintains physical infrastructure that is open to any customer and thus creates a pro-competitive environment. Cellnex's three principal areas of business encompass (i) wireless communications, (ii) broadcasting (mainly in Spain), and (iii) ancillary network services (e.g., for government agencies and municipalities). Starting with around 7,000 sites in Spain, Cellnex has increased its number to 135,000 sites (almost twentyfold) and now operates in 10 EU member states, as well as the UK and Switzerland (with more than 10,000 sites each in France, Italy, Poland, UK, and Spain). Cellnex has invested around 40 billion Euro and has reached more than 40 agreements with clients in the countries where it operates. Cellnex builds new sites for mobile operators "on demand" on the build to suit program. As regards the future, Cellnex's focus will remain on wholesale services; there are no plans to expand into the retail market. In order to sustain its growth, Cellnex aims to attract as many additional tenants as possible to its existing sites, and to consolidate and rationalize its network. In relation to regulatory landscape, Cellnex would like to see an investment friendly environment with protection for existing infrastructure and easier permitting processes. Unreasonable regulatory obligations that could create uncertainty and speculative/opportunistic behaviours should be avoided if the sector wants to deliver the challenges of the Digital Decade programme.
- Ralf Capito of VANTAGE TOWERS presented his company as a new towerco entrant in the EU. Founded in 2020 as a carve-out by Vodafone, Vantage Towers now operates in 8 European countries directly and in two additional ones via a Joint Venture (Cornerstone, UK; INWIT, IT). Across this footprint it manages more than 83,000 tower sites (in Italy, Germany, and UK the company operates more than 10,000 sites each). The company plans to invest and build thousands of new towers in the coming years, including pilot projects of wooden towers to reduce its environmental footprint. In 2023, a consortium consisting of GIP (Global Infrastructure Partners) and KKR (Kohlberg Kravis Roberts & Co) entered into a strategic partnership to invest in Vantage Towers. The company has been awarded public funds for GINT for a national 5G corridor project as well as other 5G CEF cross-border projects (5GonTrack, 5G Carolina) and is working on additional ones. The company was also awarded other funds for the installation of new sites in rural areas and white spots, e.g., the MIG program in Germany and is willing to consider other opportunities in its footprint. Vantage Towers operates passive infrastructure (macro sites, mobile cell sites, and small cells) and is open to all operators and businesses seeking to enable their connectivity (neutral host model). Its main customers include large European MNOs and other enterprise customers such as broadcasters, utility companies and potentially railway operators.

The sharing of passive infrastructure leads to more infrastructure-based competition among MNOs and Vantage Towers aims to increase its current tenancy ratio of 1.44 to 1.5 in the near to medium term. With regard to the regulatory environment, Vantage Towers criticises the long permit procedures across MS with an average duration of one year (without tacit approval) and lack of access to public infrastructure and buildings. Vantage Towers considers that the potential access and price obligations for towercos as part of the GIA proposal are disproportionate and will put past and future investment at risk, especially in the absence of a specific impact assessment and without any proven market failure among European towercos to address. For now, there is no market failure identified.

- Fabio Ruffini of INWIT described the company as the largest towerco in Italy with a market share of approximately 45%. Originally a carve-out by Telecom Italia in 2015, the company merged with Vodafone tower assets in Italy to foster the efficient development of 5G. INWIT is listed in the stock market and has no controlling shareholder: less than 30% of INWIT's shares are held by Daphne 3 S.p.A., while about 32% is held by Central Tower Holding Company B.V. and more than 36% are held by other investors. The company operates more than 23,000 towers and 7,000 remote units for DAS and Small Cells. Different to Cellnex, they only grow organically and lease the land where they build the towers. Its business model focuses on hosting passive infrastructure to telecommunications operators. INWIT plans to invest in additional towers which are open to all access seekers. Currently the company has about 50,000 tenants with a tenancy ratio of 2.2 (the highest tenancy ratio in Europe) and is targeting 2.6 by 2030. In addition, it has a small presence in the fibre market and operates around 1,000 km highway and roadway tunnels. With Telecom Italia and Vodafone, INWIT has two anchor partners, but its assets remain available to all market players, such as MNOs, FWA broadband providers and other clients. INWIT (alongside TIM and Vodafone Italia) received EU funds for the implementation of (wireless) 5G network infrastructure in market failure areas in Italy. From a regulatory point of view, INWIT encounters challenges with the processes of permit granting due to the high degree of fragmentation featured by the local authorities (e.g., it takes up to 6-8 months in Italy for permits alone to be obtained and 2 to build). INWIT underlines that the Italian transposition of BCRD (i.e. Legislative Decree n.33/2016), provides a blueprint for infrastructure access regulation that, in INWIT's view, seems more advanced than GIA proposal. Furthermore, limits in electromagnetic emissions (EMF) in Italy are much stricter compared with other EU countries. INWIT's towerco business model is already based on providing access to all potential network operators.
- Marc Schütze of 1&1 presented the perspective of a newly launched MNO seeking access to infrastructure: he noted that, after its market entry as the fourth MNO in Germany, 1&1 managed to secure a national roaming agreement with Telefónica Germany following EU intervention, as a remedy taker. The company has agreements with Vantage Towers and American Tower but claims that Vantage Towers has given preferential treatment to Vodafone, a company with which it is affiliated, at the expense of 1&1's network roll-out. After a formal complaint by 1&1, the Federal Cartel Office (BKartA) is currently investigating allegations that Vodafone obstructed 1&1's network expansion in favour of its own network rollout. 1&1 considers that the market for

infrastructure is not sufficiently competitive. Therefore, 1&1 favours the approach proposed in the draft GIA to include towercos within the scope of "network operators" which would mean that they fall within the regulatory scrutiny of NRAs. As shared infrastructure is highly significant for alternative operators, 1&1 considers that an exclusion of these infrastructure companies (from GIA) would threaten the efficiency of Gigabit rollouts and lead to an unequal regulatory treatment of infrastructures.

Oliver Füg of TELEFONICA provided an overview of the role of Telxius, the infrastructure company created by Telefónica in 2016 with ca. 16,000 towers. Following expansion in subsequent years, Telefonica divested around 31,000 towers (the European and Latin American tower divisions of Telxius) for 7.7 billion Euro to American Tower in 2021. This represents the highest multiple ever in the tower business and increases vendor diversity in tower market. After the divestiture, Telefónica Germany retains around 28,000 sites nationwide and is the largest MVNO host in the country (including 1&1). The company has engaged in a sell and leaseback agreement with Telxius / American Tower covering around 10,000 sites. American Tower remains free to offer additional contracts to other operators. Regarding regulation, Telefónica would like to see greater availability and accessibility of information about usable infrastructure. Telefonica also considers that the length of administrative proceedings for permits and Rights of Way could be significantly reduced by municipalities and authorities.

Following the session, there was a brief discussion with the participants of the workshop on site and online. The main questions raised concerned:

- (i) the definition of wholesale-only operators and how this notion will be delineated in the study;
- (ii) the leverage percentage/ratio that the infrastructure companies can afford in their modus operandi;
- (iii) the geographical overlap of infrastructure companies;
- (iv) the later timeframe of divestitures in Europe when compared to the USA.

There were also some clarification questions as regards regulation and the perspectives taken on that. Vantage Towers responded to the points raised by 1&1 concerning the investigation by the BKartA, asserting that they had not violated antitrust laws as a neutral host and explaining that this investigation is the best proof that the current system of ex-post abuse control is working. 1&1 replied that the lack of timely deployment could have serious regulatory repercussions for them as an MNO and thus small network operators need (regulatory) protection.

In response to queries on this point, some towercos mentioned they have no plans to offer active infrastructure or retail services to customers although there are frequent ongoing discussions about climbing the value chain. No towerco expressed interest in participating in frequency auctions. The towercos also mentioned that after the expiration of a tenancy agreement, contracts are typically renewed without significant differences in the conditions and under regular market conditions. In response to a participant who highlighted the high debt levels of Cellnex, the representative noted that this was a result of their previous M&A

ventures and that it should not be problematic for their business. A representative of GSMA mentioned that the divestiture of passive infrastructure in Europe is slow and lags behind projects in other parts of the world.

#### Session 2: Fiber netcos, business models and implications

The second session was chaired by IIsa Godlovitch (WIK Consult) and involved presentations from two fibre netcos (XpFibre and Onivia) and two telecoms operators which had established and also made use of infrastructure from fibre netcos (Iliad and Vodafone).

- Lionel Recorbet of XPFIBRE introduced his company as the largest independent FTTH operator in France. XpFibre (then SFR FTTH) was founded in 2018 as a divestiture from SFR / Altice. In 2019, Covage was acquired by XpFibre (then SFR FTTH) to increase its footprint in the fibre market. The footprint covers around 25% of the French territory in medium and low-density areas providing broadband access (mostly on passive infrastructure) to about 7.3 million premises in France. Its business model is based upon an open access reference offer, with standard conditions to all ISPs (residential and enterprise market). All reference offers are public and equal conditions for every operator apply, regardless of commercial volumes. The company benefits from a 20-year contract for deployment and maintenance of the network from Altice. XpFibre has ca. 2,800 customers (status at end 2022) and practices coinvestment with ISPs to mitigate take up risks. The company has also received public subsidies for the rollout in rural areas, with 100% households FTTH coverage obligations attached. The reference offers of XpFibre with its clients contain partial inflation pass-through as part of wholesale contracts and typically last 20 years (in the IRU form). XpFibre benefits from the SMP regulation of Orange in France which provides access to ducts and poles, and is considered key in contributing to the success of the business. Therefore, it heavily relies on long-term predictable terms and conditions (such as maintenance) for these wholesale products by Orange, including as regards tariffs. It also uses existing infrastructure from energy suppliers.
- Icíar Martínez Núñez of ONIVIA presented her company as the first independent pure fibre wholesale operator in Spain. Optical fibre is the primary asset of the company. It is focused on wholesaling and does not intend to expand to retail services. Onivia was founded at the end of 2019 (investor financed) with the acquisition of 940,000 FTTH premises in major Spanish cities. Onivia's network is open to all operators. Onivia has launched two major bitstream products: Integra is aimed at large and medium telco operators whereas Impulsa addresses local and regional operators. Due to further acquisitions of rural fibre networks, Onivia's network coverage expanded to around 3.6 million households in 1,300 municipalities at the end of 2022. Typically, Onivia enters into long-term contracts with the larger Tier 1 telco operators to its network and can thus achieve a high network penetration. It also provides associated services for ISPs, e.g., connectivity, installation, or mobile service with attractive offers. Some challenges they face are related to the market saturation and the overlap of networks. On the contrary, they are benefiting from access to Telefonica's regulated infrastructure based

on cost-orientation, and in the past have received subsidies for deploying in rural areas.

- Wojciech Rosiak of ILIAD gave an overview of the company's activities in 3 European countries (France, Italy, and Poland), all of them being focus countries for BEREC's upcoming study. Iliad Group has a towerco partnership with Cellnex in all three countries and maintains an FTTH netco partnership with Infravia in France and Poland. Iliad Group also partners with numerous other companies to access fibre, e.g., Open Fiber, Fibercop, and Fastweb in Italy. In Poland, Iliad acquired mobile network operator Play in 2020. In 2022, Iliad also bought the retail cable operator UPC, which reaches about 3.8 million premises. The cable network was carved out in March 2023, thus creating wholesale HFC & FTTH network operator Polski Swiatlowod Otwarty (PSO). Moreover, Iliad sold half of its stake in PSO to InfraVia Capital Partners. This move provides Iliad with additional funds to build an FTTH network for 2 million premises. Iliad considers that the main benefit of carving out HFC and fibre wholesale units is to achieve greater network utilization and secure long-term financing for rollout plans. In high density areas, there is a high degree of overlap between the infrastructures. PSO received no state aid funds in Poland. For Iliad, the commitment to non-discrimination is a key success factor for wholesale cooperation.
- Manuel Braga Monteiro and Stephen Pentland of VODAFONE presented the dual perspective of the company as an investor in VHCNs but also as a wholesale customer for alternative fibre companies and (regulated) incumbents in many EU markets: Vodafone is present in 10 European Countries (9 member states plus UK) and has the largest next generation broadband infrastructure coverage in Europe (with fibre assets in Spain, Ireland, and Portugal, as well as cable assets in Germany, Netherlands, Romania, and Czechia). Vodafone is also the anchor commercial customer to several network fibre investors and helps drive their fibre investments. The company is also reliant on (regulated) wholesale access to incumbents in some countries to serve their customers there. This represents a challenge to Vodafone, as the incumbents' strategies vary widely across Europe. In Ireland, Vodafone won a tender in 2014 to partner in a Joint Venture with ESB, the national electricity company, to build a wholesale open access fiber network: SIRO. The Joint Venture partners brought together a combination of capabilities and assets and aim to create a competitive wholesale market, as well as expand access to VHCN in Ireland. SIRO has an open commercial wholesale model with 20 retail companies using the infrastructure and it is based upon non-discriminatory volume-based contracts. The rollout took place along the electricity company's network, although there were some challenges linked to managing safety and the conditions of the legacy electricity infrastructure (ducts and poles). SIRO invested around 1 billion Euro and has passed 500,000 premises in over 130 Irish cities and towns. The combination of the fibre investment by smaller players and a competitive retail market has resulted in strong and effective infrastructure competition in Ireland and gave incentives for incumbent Eir to initiate its own fibre programme. While Vodafone considers that GIA is important in supporting alternative networks' fibre rollouts, regulated SMP access is still needed for nationwide broadband retailers.

After the session, the companies addressed some questions: XpFibre was asked if only providing passive wholesale products limits the number of its ISP clients. XpFibre responded that 95% of the French retail market is served by four operators and these players request passive infrastructure access (and operate themselves on the wholesale market for small ISPs offering active solutions). However, some local ISPs have asked for active infrastructure access, so XpFibre also offers (limited) bitstream access. XpFibre elaborated that the penetration rates in its footprint are similar in denser-populated areas to the ones in scarcer-populated zones, while a de facto monopoly remains at in-building level.

A member of ECTA noted that regulated access to ducts and poles are essential to support alternative networks operators' ability to invest including on the long term. Thus, regulation in that regard is still relevant. Another point that was made reflected on the profitability which is expected through the new investments.

One participant representing Deutsche Glasfaser asked for clarification on the scope of the study as regards the wholesale-only companies, as many network operators have a retail branch, for instance in Germany. Ilsa Godlovitch responded that the recent trend of outsourcing infrastructure which is reflective of the creation of companies not directly providing retail services was the focus of the study.

# Session 3: Perspectives of regulators and competition authorities, implications for future regulatory practice

The third session was also chaired by IIsa Godlovitch (WIK Consult) and focused on the perspectives of regulators and competition authorities on the divesture trends and how this affects competition, as well as providing an opportunity for the stakeholders to give their views on the regulatory landscape. Representatives from the Italian Competition Authority AGCM and the UK Electronic Communications Regulatory Authority Ofcom gave presentations in the session.

• Luigi Di Gaetano of the Italian Competition Authority AGCM focused on the competition dynamics of tower and access infrastructure companies. He noted that competition concerns regarding towercos include horizontal and vertical effects in mergers, vertical restrictions in tenancy agreements and coordinated effects (in Joint Ventures). He noted that the Italian market had featured a number of cases. The European Commission concluded that the Vodafone Italia / TIM / INWIT joint venture would result in substantial combined market shares and created competition concerns. AGCM reached similar conclusions regarding Cellnex Italia's acquisition of CK Hutchinson. As a result, both were required to grant access in areas where they benefited from market power. AGCM also opened an investigation regarding competition problems linked to the Joint Venture FiberCop between Telecom Italia, KKR and Fastweb in late 2020. FiberCop aimed to deploy fibre to more than 2,500 cities and ca. 13.6 million premises. Commitments for TIM and Fastweb were established to balance the problems of foreclosing investment by alternative operators and the need to incentivise the deployment of FiberCop's infrastructure. For instance, to support competition in the wholesale and retail market, TIM must offer dark fibre

backhaul access to alternative operators for 20 years. FiberCop was greenlighted by AGCM in February 2022.

After the presentation, one participant asked if the infrastructure competition would deteriorate in the future as a result of the proposed merger of Open Fiber and TIM netco. Mr Gaetano responded that AGCM could not comment and that the situation regarding possible merger plans in Italy was fluid. There was a comment from the floor that, from a competition perspective, Open Fiber and FiberCop's deployment is complementary, having built infrastructure in different areas.

Brian Potterill of OFCOM discussed competition dynamics linked to infrastructure companies in the UK. He noted that, in the mobile market, two major network sharing agreements have been reached in recent years - between Vodafone / Virgin Media O2 and EE / Three. Mobile Broadband Network Limited (MBNL), a JV between EE / Three, is mostly passive sharing. Beacon, involving Vodafone / VMO2 is mostly active sharing, encompassing different arrangements in different parts of the country. In the fixed sector, different regulatory levers have supported fibre rollout. The Ofcom Strategic Review 2016<sup>2</sup> initiated the legal separation of Openreach. The Wholesale Local Access Market Review in 2018 introduced duct and pole access as a remedy, supported by CEO level commitment to support its effective implementation. The Wholesale Fixed Telecoms Market Review in 2021 included a loosening of cost-based remedies and some pricing flexibility. The government strategy to promote fibre investment also included a permissive planning regime for fixed networks. Rights of Way are available for any provider of infrastructure or network, giving them the ability to install poles and dig up the public highway. The UK government also launched a £5bn Gigabit programme. Ofcom regarded the outcome as broadly positive. As a result of these actions, an acceleration of fibre rollout and infrastructure competition can be observed with more than 100 fiber networks with different business models (e.g., focus on multi-dwelling units or rural areas). To conclude, the point that no substantial business/ competition failure has been identified by Ofcom so far was made.

After the presentation, a representative of ECTA asked whether it was a problem that BT only requests fibre access from Openreach and not from any other operators. Ofcom responded that the Openreach rollout is very quick and accounts for over two-thirds of the total rollout. Therefore, it remains possible that BT will never buy from other alternative operators. It was also briefly discussed that the relatively easy access to capital access in the UK may be one driver for the rapid deployment of fibre.

Then, the workshop participants were asked to share their positions about the implications of the development of infrastructure companies - towercos and fibrecos - for regulation, as well as to explain how they interpreted concepts relevant for regulation (e.g., wholesale-only, network operator under the BCRD). Other questions that were asked concerned (i) the different implications of the companies' shareholding on the provision of access, if any, (ii) potential issues which could be faced when leasing infrastructure, (iii) the relevance of SMP

<sup>&</sup>lt;sup>2</sup> See Ofcom (2015): https://www.ofcom.org.uk/consultations-and-statements/category-1/dcr-discussion

regulation, as well as state-aid financing as a "regulatory tool", and (iv) potential over-building problems and infrastructure competition.

Dragan Jovanovic of **ATC/EWIA** stated that the future regulatory regime should follow an evidence-based approach and be more about (competitive) effects than definitions. He added that there is no evidence or even indication yet that there are problems with access which have given rise to anti-competitive effects or, more generally, market-failure associated with independent towercos, and therefore no regulation on towercos is needed.

Christof Sommerberg of **Deutsche Glasfaser** argued that the definition of infrastructure companies may get blurred as many (private) infrastructure companies offer retail services due to retail market conditions but keep their wholesale business. He also noted that care would be needed regarding potential leverage by SMP operators from copper regulated access to fibre. He noted that wholesale-only seems viable when the wholesale-only operator is a spin-off of SMP operator, as it benefits from captive customers, but could otherwise be challenging. Generally, neither SMP obligations, nor state aid interventions are needed if the retail market is competitive.

Luc Hindrycks of **ECTA** noted that ex-ante regulation would remain important, while access to ducts needs to be regulated for a very long time and claimed that incumbents had not lost money through regulated products. He said that access to ducts that were built with taxpayers' money should be available for 50+ years. Moreover, he questioned whether wholesale only operators should be referred to as such if they are owned by a vertically integrated operator. Referring to long-term perspectives of wholesale-only operators, he added that new competitive issues can emerge if such an operator becomes vertically integrated. He further added that the European model, including the well-established competition law principle that those with special power also bear special responsibility, must be preserved. Deregulation has never led to more investment. On the contrary, where there is less competitive pressure, investments and innovation are ultimately reduced. Hence, the EECC remains fit for purpose, is technology agnostic and based on the timeless basic competition law principles. It allows to regulate any technology and has introduced the concept of VHCN.

Stephen Pentland of **Vodafone** noted that he considered that the dynamics in the mobile and fixed market are quite different as there are fewer infrastructure companies in the fixed sector compared with mobile. Regarding GIA, he noted that access to ducts and poles might significantly accelerate smaller operators' network investments. He also added that future regulation must take into account that the cost of financing has increased considerably which particularly disfavours new entrants. As a result, the divestiture of towers is one opportunity to inject external finance into companies. Finally, the importance of commercial agreements for setting up the regulatory scenery has been stressed.

**ETNO** emphasized that regulation should strive for technological neutrality. They also highlighted the importance of commercial agreements across different business models and markets. They note a preferential regulatory treatment for wholesale-only as defined in the EECC. The Code exempts SMP wholesale-only operators from symmetric access regulation.

At the same time, they noted that vertically integrated operators make substantial investments in networks as well, promoting competition through the implementation of non-discrimination safeguards. It is important that the regulatory framework, explicitly recognizing other procompetitive models that enhance cooperation is implemented by vertically integrated operators (e.g., co-investment and RAN-sharing).

### Annex – Workshop agenda

## Workshop

# Competition dynamics of tower and access infrastructure companies

#### Date: 20 June

#### Time: 10:00 – 14:30 CEST

Towercos and fiber netcos have become an increasingly important part of the telecoms landscape in many European countries. In this workshop, which is conducted in connection with a study by WIK-Consult for BEREC, we will explore how and why infrastructure companies have been formed, the structure of the companies and their access offers, and the implications for competition and investment in fixed and mobile very high-capacity networks. We will conclude with a discussion around the implications of the rise of infrastructure companies for regulation under the EU Electronic Communications Code, BCRD and forthcoming Gigabit Infrastructure Act.

#### 10:00 – 10:10 Introduction from BEREC and the WIK project team

The workshop will open with an introduction from BEREC and a brief overview from WIK-Consult about the aims of the workshop, the objectives of the study, timetable, and stakeholder engagement plans.

# 10:10 - 11:20Session 1: The rise of the towercos - Trends in mobile<br/>infrastructure outsourcing

Long a feature of the US market, towercos are playing an increasing role in the EU with the expansion of independent tower companies, and asset divestments by major mobile network operators. In this session we hear from towercos and telcos about what is motivating the drive towards outsourcing and the opportunities and challenges this creates for towercos and their customers / sometime shareholders. Has the drive towards outsourcing been effective in boosting efficiency and supporting deployment of key infrastructure? What have been the implications for competition?

Chair	Christian Hocepied	University of Namur
Jaume	Pujol Huguet	Cellnex

Ralf Capito	Vantage Towers
Fabio Ruffini	INWIT
Marc Schütze	1&1
Oliver Füg	Telefonica

#### 11:20 – 12:30 Session 2: Fiber netcos, business models and implications

A growing number of telecom operators are hiving or spinning off their fiber assets in order to take advantage of the opportunities for increased asset valuations, new capital and in some cases State Aid. In addition, long term investors and municipalities are continuing to deploy fiber based on wholesale only models across Europe. In this session we look at how these business models are developing and the implications for competition and investment.

Chair IIsa Godlovitch	WIK-Consult
Lionel Recorbet	XP Fibre
lciar Martínez Nuñez	Onivia
Wojciech Rosiak	lliad
Manuel Braga-Monteiro	Vodafone

#### 12:30 – 13:10 Lunch break

# 13:10 - 14:25Session 3: Perspectives of regulators and competition<br/>authorities, implications for future regulatory practice

In this session we hear from regulatory and competition authorities about how they have responded to the creation of towercos and netcos and discuss the implications of these developments for the proposed Gigabit Infrastructure Act as well as for the ongoing implementation of the EECC and BCRD.

Chair IIsa Godlovitch	WIK-Consult
Luigi di Gaetano	AGCM, Italian Competition Authority
Brian Potterill	Ofcom, UK telecoms regulatory authority

#### 14:30

#### Concluding remarks and workshop close