Spectrum of divergence in competition law:
EU courts' approach to innovation in Commission v. CK Telecoms*

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Abstract

Based on case study of *Commission v CK Telecoms UK Investments,* this paper analyses the subliminal approaches adopted by EU courts – namely, the General Court and the European Court of Justice – toward the interface between innovation and competition. It argues that, although the courts barely approached this interface explicitly, a possible explanation for many of their diverging views in the case is precisely their different views on the concept of innovation and its correlation with competition, a key element in asserting the legality of a conduct or transaction in innovation-driven markets such as mobile telecommunications. Despite the important standards set by the detailed judgement, this paper argues that the approach adopted by the courts, wherein attention to this divergence was not unfolded, bares the risks of harming consistency in competition case-law and reducing legal certainty.

Keywords: Competition law, Telecommunications, 5G, EU courts, innovation, merger review

1. Introduction

Competition (or the lack of it) can play a key role in technological and scientific creations. As widely known – and sometimes viewed as a *cliché* of competition law handbooks –, competition increases incentives to innovate, boosting investments in projects that seek to be one step further of competitors in technological development. Though a theoretical assertion, it commonly serves as basis for arguments in antitrust litigation. Additionally, this effect of competition long serves as one of the building blocks of competition policies worldwide and steams human creativity, leading to recurrent interaction between academia, corporations, and governments. Therefore, the relation between competition and innovation is not new and it is generally convergent.

However, the relation between competition and innovation has not always been hand-in-hand. Some scientific and technological creations that impact modern life are arguably products of weak competition. Some argue that major creations were only possible because their creators (or the companies to which they were linked) had economic power and enjoyed minimum stability in the market. Economic literature has a longstanding debate about it since decades ago[1] and, meanwhile, the intense

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[1] The earliest debate was marked by the diverging views between Joseph Schumpeter, who, in a 1943 paper, argued that monopolists enjoy bigger margins of profits over their investments (thus, higher incentives to innovate) than players in a competitive market, and Kenneth Arrow, who, in a 1972 book's chapter, argued that competitive markets maximise incentives to innovate because expectation of profits is higher under competition due to the goal of becoming a monopolist. Joseph Schumpeter, *Capitalism, socialism and democracy* (Routledge 2003). Kenneth Arrow, 'Economic

debate of competition scrutiny over major digital platforms in the last years has touched upon this very topic, leading competition experts and agencies to question how much incentive to innovate do consolidated "big techs" have.

There is, thus, a challenge both theoretical – *i.e.*, the question of how much competition is aligned with or optimizes incentives to innovate – and practical – *i.e.*, the question of how to measure a market player's incentives to innovate in each specific context. Why is this relevant to this paper? The case study conducted in the sections bellow goes to the heart of these two challenges under the European Union's ("EU") competition law. Given the uncertainty intrinsic to the forward-looking approach of merger review and the role competition law can play in the shift and consolidation of new generation of mobile technology, understanding how EU courts interpret those two challenges is key[2]. This role of competition law is more evident in the current stage of 5G deployment, but it is also applicable to the shift of any generation of mobile telecommunication technology.

This paper conducts a case study of a recent judgement delivered by the European Court of Justice ("ECJ"), namely, the *Commission v CK Telecoms UK Investments* case ("CK Telecoms case")[3], concerning two mobile network operators ("MNOs") in the UK telecommunications sector – CK Hutchison Holdings Limited ("CK Telecoms") and Telefónica Europe Plc (also known for its brand "O2")[4]. The ECJ ruled the case on 13 July 2023, annulling the General Court's decision about the transaction and referring the case back to said court, where new judgement will be delivered. Although the case is still pending definitive conclusion to current date of writing, its relevance goes beyond an ordinary merger control decision, since (i) the case implicates the reduction of MNOs in the market from four to three – commonly known as 4-to-3 transactions – and (ii) the ECJ went to the basics of merger control to set core standards and concepts, despite decades of consolidated competition law in the EU.

While being an extremely recent judgement from the time this paper was written, the ECJ judgement of the CK Telecoms case had been long awaited by stakeholders and competition experts[5], raised significant repercussion as soon as it was published[6], and was described by Vice-President of the European Commission ("Commission"), Margrethe Vestager, as going "far beyond the specific

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welfare and the allocation of resources for invention' in Charles K. Rowley (ed), *Readings in industrial economics* (volume 2, Macmillian 1972) 219-236.

[2] The uncertainty of the forward-looking approach of merger review was one of the few points in which the General Court and the European Court of Justice agreed upon in the judgement of the European Commission's appeal. Case T-399/16, *CK Telecoms UK Investments Ltd. v European Commission* [2020] OJ C371/10 (General Court's decision) paras 112-115. Case C-376/20 P *CK Telecoms UK Investments Ltd. v European Commission* [2023] (European Court of Justice's decision) paras 82-86.

[3] ECJ's decision (n 2).

[4] It is worth highlighting that, throughout the CK Telecoms case, CK Hutchinson was referred to as "Three", but, in this paper, it will be referred to by its holding's name, CK Telecoms.

[5] Javier Espinoza and Anna Gross, 'European telecoms groups await M&A green light' *Financial Times* (18 October 2022) <https://www.ft.com/content/604d1051-7428-4bcf-aed5-48de0174ac1e> accessed 29 August 2023.

[6] Gerwin van Gerven, William Leslie and Annamaria Mangiaracina, 'Back to Basics: Court of Justice overturns General Court judgment annulling the prohibition of CK Hutchison's 2016 merger with O2 in the UK' (*Linklaters*, 17 July 2023) <https://www.linklaters.com/en/insights/blogs/linkingcompetition/2023/july/copy-of-new-blog> accessed 29 August 2023. Antonio Bavasso, Josh Buckland and Michael Tagliavini, 'Highest EU Court reinforces merger control in telco sector and beyond' (*Simpson Thacher*, 13 July 2023) <https://www.stblaw.com/docs/default-source/Publications/highest-eu-court-reinforces-merger-control-in-telco-sector-and-beyond_2023> accessed 29 August 2023. Giorgio Monti, 'Horizontal mergers: Refining the Commission's assessment standards' (2023) TILEC Discussion Paper nº 2023-11 <https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4514910> accessed 29 August 2023.

circumstances and mobile communications sector affected by the Commission's decision"[7]. In addition, the CK Telecoms case was the first in which EU courts had to assert if a transaction raised unilateral effects without a resulting dominant position and the Commission's decision in this case was the first time it blocked a transaction in the telecommunications sector[8]. In other words, like it or not, the CK Telecoms case tends to consolidate itself as a leading case in EU competition case-law.

The context of the transaction also raises the relevance of the case. The MNOs concerned and the markets in which they operate are under the process of deployment of the fifth-generation mobile technology – also known as "5G"[9] –, while one of the main discussions in the case was the effects of the concentration in the MNOs' incentives to invest in telecommunications networks and in their network sharing agreements. The current stage of 5G deployment – and early discussions of 6G – is an ideal context to discuss the interaction between innovation and competition, because, on one hand, 5G demands major investments for it to fulfil its innovation role and provide its expected social and economic benefits to society[10], while, on the other hand, the telecommunications sector is traditionally oligopolistic and marked by barriers to entry[11].

Therefore, competition law should play a key role in this generation technology. However, an open question is precisely what role or how competition law can best contribute to the development of new generation technologies such as 5G. A case study of the CK Telecoms case can add to the current academic literature to address this question. Some interesting, though not obvious, conclusions that one can extract from the current literature are that, firstly, competition law is insufficient to promote a new generation technology.

Competition law is a policy tool that promotes a level-playing field in the market, but does not substitute skills and incentives required to promote a new generation technology, such as a wide pool of skilled workers in the labour market and access to key inputs in the geopolitical scenario (*e.g.*, electronic components)[12]. In other words, new generation technologies (*i.e.*, innovation) demand a mix of public policies that range from investments in education, incentives for research and development, and

[7] Foo Yun Chee, 'Fresh M&A blow for telcos as Three/O2 debate reopened' *Reuters* (13 July 2023) <https://www.reuters.com/markets/deals/eu-court-sends-hutchison-challenge-eu-veto-02-deal-lower-tribunal-2023-07-13/> accessed 29 August 2023.

[8] Giorgio Monti, 'EU merger control after the Grand Chamber's judgment in Commission v CK Telecoms Investments' (2023) 3 <https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4537510> accessed 29 August 2023.

[9] 5G, like other generations of communication technology, is a standard of technology, *i.e.*, a new form through which users can communicate between themselves by using technological devices. Though every segment has its stages of technological development, generations of communication technology – 3G, 4G, etc. – is usually associated to mobile telecommunication services (*i.e.*, communication and internet services through mobile devices). Due to the constant evolution of communication technology, there are no clear boundaries between generations in transition periods, but, generally, what defines the shift from one generation to another is a deep change of protocol connection and speed of data transmission between the devices. Georges Houngbonon and François Jeanjean, 'What level of competition intensity maximises investment in the wireless industry?' [2016] 40 Telecommunications Policy 777.

[10] For more details about the role and effects of 5G technology, see section 2 below.

[11] In an early report from the OECD (2001, pp. 7-8) about competition in the telecommunications sector, high market concentration and complaints of anticompetitive behaviour were common findings across jurisdictions. In addition, typical barriers to entry of the telecommunications sector include requirements of regulatory authorisations to operate and high costs to implement and expand network infrastructure. OECD, 'Competition and regulation issues in telecommunications' (2001) 7-8 <https://www.oecd.org/daf/competition/sectors/1834399.pdf> accessed 30 August 2023

[12] Aureliano da Ponte, Gonzalo Leon and Isabel Alvarez, 'Technological sovereignty of the EU in advanced 5G mobile communications: An empirical approach' [2023] 47 Telecommunications Policy.

geopolitical positioning that allows access to key inputs, leaving competition agencies in an apparently discreet position[13], despite a longstanding case-law of antitrust scrutiny in this sector[14].

Secondly, even if the extent of competition law's role in promoting 5G was uncontroversial, there is still diverging opinions about which role that is or how it should be implemented. Over the last years, various economic studies have attempted to identify the level of competition that optimizes incentives to innovate in the telecom sector, but the results were mixed[15]. This is not unrelated to the legal aspect of competition policy, since defining the level of competition that optimizes incentives to innovate is arguably one of the roles of competition agencies, especially in competition law's consolidated effects-based approach. In other words, when the parameter of the optimising level of competition is not clear, as unclear are the boundaries of competition law and the correct standards to be used by the competition authority in the sector.

Given the above, the CK Telecoms case allows for an unprecedented case study. While the divergences between the two EU courts on the case suggest that law is simply a game of words – the ECJ spends tons of paragraphs to discuss the impact of the use of the word "particularly" by the General Court in defining merger review standards –, this paper argues that the true discussion behind the CK Telecoms case is about the relation between innovation and competition. This is far from explicit, since the courts hardly mention innovation throughout their judgements, but, when the relation between innovation and competition is seen as an underlining debate, the positions adopted by each court in several grounds of appeal fall into place. The purpose of this paper is not to assert which court took the best or arguably correct interpretation, but, rather, explore why their views were different and the implications thereof. This assessment is particularly relevant in current date of writing, when a reform of EU courts in underway[16].

The question that this paper seeks to address is: what does the divergence between EU courts in the CK Telecoms case reveals about the relation between innovation and competition? This paper argues that, due to the uncertainty of this relationship, legal certainty can only be achieved under a dialectical judicial review, where courts unfold underlying divergences of concepts and dialogue between themselves to enhance chances of future case-law consistency. The methodology used to answer this question was the one of case study, as anticipated above, encompassing both comparison of legal reasoning and electronic automated tracking of search terms in the decisions issued in the case. Case studies in legal scholarship may bear the risk of reaching empirical conclusions of limited applicability due to the intrinsic specificity of a case. However, when the chosen case is significantly impactful to law and has peculiarities that transcend its own boundaries, as the present CK Telecoms case, the case study methodology allows

[13] Most studies on 5G are not even from the competition law field. Differently, most are from Economics, Political Sciences, and International Relations, at least those from the Humanities sciences. Research finding based on the use of the keyword "5G" (individually or jointly with the term "competition") in academic databases JStor and Elsevier.

[14] *E.g.*, Case C-280/08 *Deutsche Telekom AG v. Commission* [2010].

[15] Houngbonon and Jeanjean (n 9) 775-777. Specifically, some argue that the relation between market concentration and incentives to innovate is represented by a parable, meaning that incentives are optimised in oligopolies, while others argue that that relation is represented by an inverted parable, meaning incentives are optimised in either a near-monopoly or a highly competitive market.

[16] 'Reform of the Statute of the Court of Justice: Council and Parliament Negotiators Reach Provisional Agreement' (*Consilium,* 7 December 2023) <https://www.consilium.europa.eu/en/press/press-releases/2023/12/07/reform-of-the-statute-of-the-court-of-justice-council-and-parliament-negotiators-reach-provisional-agreement/>

for a concrete and nearly real-time assertion of the construction of legal thinking. This is what this paper seeks by choosing to study the CK Telecoms case.

This paper is structured as follows, besides the present introductory section and the concluding remarks at the end. Simply put, this paper analyses how innovation and competition relate to one another in 5G deployment, analyses how the EU courts addressed this issue and, finally, analyses the potential implication of such judicial approach. **Section 2** explains how competition variables drive incentives for innovation in the deployment of 5G technology. With that, one has the context of the case under study and the technical background to identify the variables that guided the arguments of the case. **Section 3** describes the CK Telecoms case in subsections, specifically, (i) the transaction filed by CK Telecoms and O2 to the Commission, (ii) the procedural steps that led the case up to the ECJ, and (iii) the legal reasoning adopted by the General Court and the ECJ.

Since this paper focuses on a specific aspect of the case (*i.e.*, the standards to interpret the relation between competition and innovation), section 3 will not present the complete legal reasoning of the EU courts, despite their importance to EU competition law. Finally, **section 4** will present the potential implications of the standards adopted in the case. Specifically, this section will analyse possible effects of the approach adopted by the EU courts in the CK Telecoms case to the shift of a new generation technology, under a judicial policymaking perspective. Section 4 uses academic literature of constitutional law and general legal theory, which, despite not being commonly interfaced with competition law, helps one understand the relevance of the CK Telecoms case to competition policy.

2. 5G deployment and competition variables

Protecting competition demands an inevitable effort of predicting the future, since the assertion of a transaction or a conduct as anticompetitive commonly (though not always) involves asserting the net effects of that transaction or conduct in the market. Though this is a universal approach in basically all jurisdictions worldwide that adopt competition rules, in the EU, it results from the wording of the Treaty for the Functioning of the European Union (TFEU)[17].

This effort of predicting the future is commonly difficult and, to an extent, unprecise. Usually, when a competition agency or court attempts to assert the effects of something, those effects have not yet been materialised. In addition, the effects are hardly ever completely positive or negative to competition, usually involving both types of effects and, therefore, demanding a balance between them to reach the net effects. Given the lack of precise measurements of effects and their positive or negative quality to competition, even with today's economic tools, defining the net effects can occasionally end up as a clash of plausible arguments in antitrust litigation. The CK Telecoms case might appear like that.

One may wonder if there is anything different to this challenge in the telecommunications sector in general or in the 5G context specifically. A peculiarity perhaps present in only a few other sectors is the growing demand for higher investments on infrastructure as the technology advances. This is

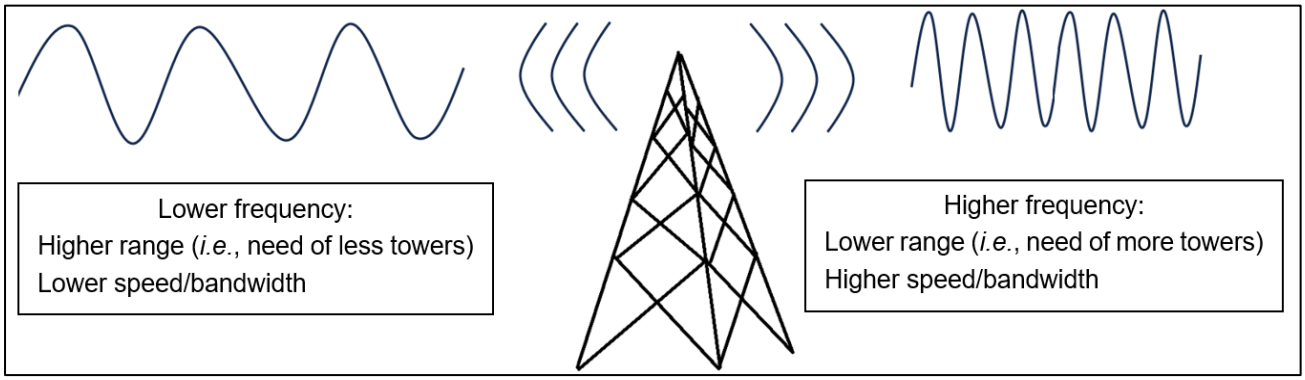
[17] Consolidated version of the Treaty on the Functioning of the European Union [2012] OJ C326/47, article 101: "The following shall be prohibited as incompatible with the internal market: all agreements between undertakings, decisions by associations of undertakings and concerted practices which may affect trade between Member States and which have as their object **or effect the prevention, restriction or distortion of competition** within the internal market (…)" (author's remarks). Ibid., article 102: "Any abuse by one or more undertakings of a dominant position within the internal market or in a substantial part of it shall be prohibited as incompatible with the internal market in so far **as it may affect trade between Member States**" (author's remarks).

counterintuitive, since, in many markets, technological development leads to less dependency on physical infrastructure. In the CK Telecoms case, therefore, investment in network infrastructure equates to innovation. The correlation between investments on infrastructure and technological development in 5G services is due to the following technical aspect of this activity.

Specifically, telecommunication services are provided through the electromagnetic waves that go from core networks to electronic devices used by consumers. In other words, without these waves, there is no internet and no mobile telephony services. These waves are technically called "radiofrequency". Since these invisible airwaves are limited natural resources, nation-States commonly qualify radiofrequency spectrums as public goods to enable these essential services in modern society[18], legally meaning that their use is subject to State supervision and prior authorisation. Though the institutional design may vary per jurisdiction, the authority in charge of granting these authorisations is usually the telecom sector regulator or the ministry of communication and technological policies. In the EU, though the Commission is entitled to coordinate and establish policy for a harmonised use of radiofrequency spectrum, managing spectrum is for Member States, who implement the Commission's policies according to national peculiarities and assign rights to use of spectrum to market players.

For the provision of 5G services, telecom operators have to use frequency bands – a measurement of the radiofrequency waves – that are generally between 3.3 and 3.8 GHz, which is higher than the frequency bands of legacy technologies, such as 4G and 3G. Why is this relevant to the correlation between technological development and investments on infrastructure? Since data capacity (*i.e.*, the amount of data a certain network can support) and penetration (*i.e.*, the range of connectivity to which a certain network can reach in terms of area and path through physical barriers like walls) walk in opposite paths[19], higher frequency bands need more antennas (and their underlining infrastructure, such as site equipment and towers) per area. In other words, 5G technology requires more investment in network infrastructure – *i.e.*, more antennas and ancillary infrastructure per area – than previous generation technologies. Image 1 below illustrates this trade-off:

Image 1 – Illustration of range/speed trade-off in radiofrequency variation



Source: Author's creation

[18] OECD, 'Developments in spectrum management for communication services' (2022) 8-10 <https://www.oecd.org/sti/broadband/developments-in-spectrum-management-for-communication-services-175e7ce5-en.htm> accessed 29 August 2023.

[19] Ibid. 9. Damien Geradin and Theano Karanikioti, 'Network sharing and EU competition law in the 5G era: a case of policy mismatch' TILEC Discussion Paper 2020-37 <https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3628250> accessed 29 August 2023.

This is particularly relevant in the growing use of data. 5G technology is expected to bring unprecedented benefits for being an expressively faster form of data transfer[20], providing better connection capacity – *i.e.*, more devices connected to its networks and greater quantity of data process – and allowing for less energy consumption for network operation – *i.e.*, it can be a more sustainable technology[21]. Due to this greater capacity and velocity of data transfer, 5G technology allows for the Internet of Things ("IoT"), where more everyday devices are connected into a telecommunication network, bringing new business models, potentially changing consumer behaviour, and impacting banking services, urban traffic, medical services, agriculture and beyond. Not only is capacity to support high volume of data a growing demand, but, also, low connection latency due to demand of greater precision (*e.g.*, in automated medical surgeries and self-driven vehicles).

The relevance of this peculiarity is that, firstly, it implicates higher barriers to entry due to high level of investments demanded to innovate towards a network that satisfies this growing demand. The required investments in this shift of generation of mobile technology is higher than the investments required in the transitions between previous generations[22]. As in other innovation-intensive markets with high barriers to entry, players demand economies of scale for their investments to be profitable, leading to a tendency of an oligopoly – *i.e.*, more competition does not necessarily enhance incentives to innovate. Network sharing agreements can play a key role in preventing these barriers by, on one hand, allowing players to optimise the use of their own infrastructure and, on the other hand, allowing entrants to compete without the need of building their own infrastructure from scratch. In this scenario, discriminating or foreclosing competitors' access to network infrastructure in the wholesale market undermines competition.

Secondly – and less present in other market sectors –, 5G technology is subject to the risk of an anticompetitive heritage, *i.e.*, due to the dependency on physical infrastructure, current incumbents that own a consolidated and wide-reaching network infrastructure have both a competitive advantage and a capacity to discriminate over entrants. This can make 5G and future generation technologies with the same (or worse) competitive framework of legacy generations instead of more competitive.

This concern is noticeable in the relation between MNOs (mobile network operators, as mentioned in the previous section) and mobile virtual network operators ("MVNOs"). MNOs, like CK Telecoms and O2, own network infrastructure and authorization to use radiofrequency spectrum, while MVNOs operate based on access to that network and spectrum as granted by the MNO under a commercial agreement. Therefore, although both compete in the retail market, MNOs and MVNOs can also have a "vertical" relationship – *i.e.*, operate as supplier and client, respectively.

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[20] The estimates vary per study and phase of 5G technology, but, to grasp an idea, an initial form of 5G is 100 times faster to transfer the same amount of data than 4G technology, with the capacity of transferring 10 Gigabits per second (Gbps) compared to the 4G's capacity to transfer 100 Megabits per second (Mbps). European Commission, 'Accelerating the 5G transition in Europe: how to boost investments in transformative 5G solutions' (François Gilles and Jaroslav Toth, 2021) 5 <https://doi.org/10.2867/252427> accessed 29 August 2023.

[21] Accenture, 'The impact of 5G on the European economy' (2021) 3 <https://www.accenture.com/_acnmedia/PDF-144/Accenture-5G-WP-EU-Feb26.pdf?_sm_au_=iVVZRW54FHZ10n2PVkFHNKt0jRsMJ> accessed 29 August 2023. PWC, 'The global economic impact of 5G' (2021) 4 <https://www.pwc.com/gx/en/tmt/5g/global-economic-impact-5g.pdf> accessed 29 August 2023.

[22] Will Taylor and Adrien Cervera-Jackson, 'Competition implications of the transition to 5G' (*International Bar Association* 2020) <https://www.ibanet.org/article/8fe7b254-f2e9-41b2-a9d6-c259838aeef0#_ftn1> accessed 29 August 2023.

Given this framework, network sharing agreements become key for the viability of competition. Otherwise, MNOs would need to massively expand their network infrastructure and MVNOs would have to construct a mirrored network infrastructure to that of MNOs, meaning even higher barriers to entry, as well as more impact to the environment. With network sharing agreements, an operator receives compensation or reciprocal access to network infrastructure in exchange of allowing the other operator to access its network infrastructure. In this context, predicting the effects of a certain conduct and transaction has its own nuances in the telecommunications sector and the effort of EU courts in the CK Telecoms case is no different, as seen in the following section.

3. European Commission v. CK Telecoms

a) The proposed acquisition

The case concerns the concentration between CK Telecoms and O2 through the acquisition of 100% of O2's stocks by one of CK Telecoms' subsidiary, Hutchison 3G UK Investments[23]. This means that the business decision-making core of the two companies would be under the same corporate structure, excluding or weakening competition between them (a natural implication of every concentration).

Additionally, this would also mean that CK Telecoms' and O2's network sharing agreements would be managed by the same corporate structure. At the time of filing, CK Telecoms had a network sharing agreement with EE under a joint venture called "MBNL", while O2 had two network sharing agreements with Vodafone knows as "Beacon", comprising a joint venture called CTIL and a separate agreement to share network under 2G, 3G and 4G[24].

As anticipated in section 1 above, the acquisition of O2 by CK Telecoms would reduce the number of MNOs in the UK market from four to three, meaning that the market was already oligopolistic and the proposed acquisition would increase the level of market concentration. Specifically, the proposed acquisition would involve the second highest player in the market (O2) and the fourth (CK Telecoms). Therefore, the resulting entity of the proposed acquisition would achieve a market share of between 30% and 40% to compete with the market leader (EE, owned by British Telecom - BT[25]) and the third largest player in the market (Vodafone). This "4-to-3" nature of the transaction raised the expected effect of market concentration and, therefore, increased its effects in the parties' incentives to innovate.

The transaction involves two markets of the telecom sector. Though distinct, the markets affect one another in a complementary way, reason why they are "vertically" related, to use the competition law jargon. The two markets are the retail mobile telecommunications and the wholesale access to mobile network infrastructure, both in the UK.

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[23] The specific design of the transaction was not set at the time of the filing of the operation, since two alternative structures were proposed (one kept redacted in the case records, while the other, as mentioned above, concerned Hutchinson 3G UK Investments acquiring all shares of O2 and, due to CK Telecoms' control over Hutchinson, O2 would technically be under its control as well) (paras 24-32 of the Commission's decision, n 23). This is why, during the merger review analysis conducted by the EU courts, constant reference is made to a "plan A" and a "plan B", referring to the two alternative transaction structures, which would be defined after the merger review proceeding.

[24] *Hutchison 3G UK / Telefonica UK* (Case M.7612) Commission Decision 2796 final [2016] OJ C357/1 para 143.

[25] For greater context of the UK market, it is worth highlighting that EE and BT were once competitors. EE operated as a joint venture between French telecom operator Orange and German telecom operator Deutsche Telekom AG. However, in 2016, BT acquired EE after clearance from the UK Competition and Markets Authority (CMA). See 'BT Group plc and EE Limited: a report on the anticipated acquisition by BT Group plc of EE Limited' 15 January 2016.

b) The review proceeding

The proposed acquisition was notified to the Commission on 11 September 2015. Over the following weeks, the Commission conducted the so-called "phase I" investigation, in which, according to article 6(1) of Regulation-EC nº 139/2004 ("EU Merger Regulation"), it assesses whether the proposed merger falls withing the scope of the merger review regulation and whether it raises "serious doubts as to its compatibility with the common market". On 30 October 2015, the Commission issued a decision according to which the proposed acquisition should be subject to a "phase II" investigation, initiating the proceeding for a deeper review of the transaction and allowing the parties to present commitments to address the Commission's concerns.

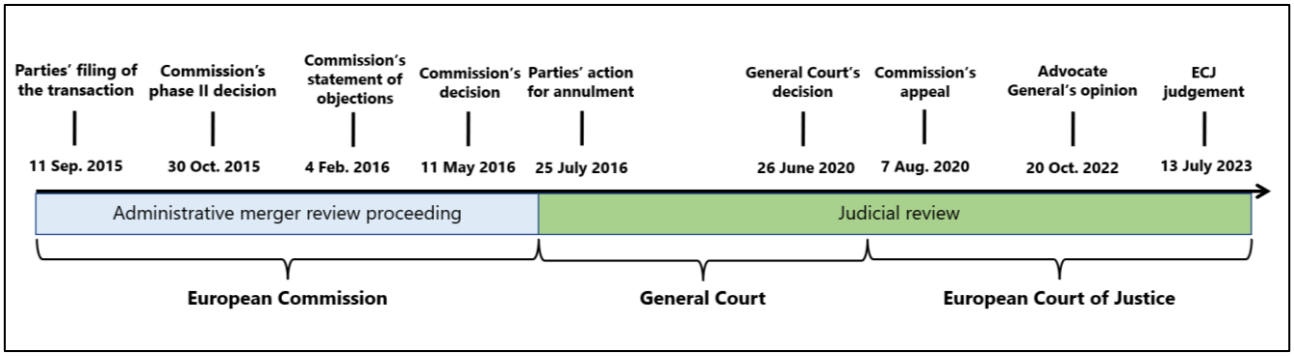
Despite dialogue between the Commission and the parties, the Commission found that its phase II investigation confirmed its concerns, leading to the issuance of a statement of objections on 4 February 2016. Over the following months, the parties proposed three different sets of revised commitments, while the Commission conducted a market test, until its final decision on 11 May 2016, where it considered the proposed commitments as insufficient to address the risk of the proposed acquisition hindering competition in a substantial part of the EU's common market, in both markets affected by the transaction (retail and wholesale)[26]. In other words, the Commission blocked the proposed acquisition of O2 by CK Telecoms.

On 25 July 2016, the parties filed an action for annulment of the Commission's decision before the General Court[27], giving birth to the judicial review proceeding. The parties argued that the Commission made wrong assessments about the effects of the proposed acquisition, the competitive dynamics of the retail and wholesale markets, and the suitability of the parties' proposed commitments to address the Commission's concerns, along with ancillary arguments of substantive and procedural natures. On 26 June 2020, the General Court upheld most of the parties' arguments and granted their action for annulment, annulling the Commission's decision in its entirety. On 07 August 2020, the Commission filed an appeal against the General Court's decision before the ECJ, requesting it to review the decision and refer the case.

After initial discussions about access to the case files, answer to inquiries made by the Court, and an oral hearing along the years of 2021 and 2022, the Advocate-General Kokott delivered her opinion on 20 October 2022, arguing that the Court should decide in accordance with the Commission's pleas and refer the case back to the General Court to adjudicate on the dispute, since, in her view, the case did not have the necessary information to provide final judgement. On 13 July 2023, the Court ruled the case, deciding in favour of most of the Commission's pleas and referring the case back to the General Court for new judgement under the terms and standards set by the ECJ. Image 2 below provides a summarised timeline of the case's proceeding:

[26] Commission decision (n 23).
[27] General Court's decision (n 2).

Image 2 – Timeline of the CK Telecoms case



Source: Author's creation

Before diving into the merits of the case, it is worth highlighting the length of this merger review proceeding for the purposes of the relation between competition and innovation. Considering that the parties filed the transaction in September 2015 and the case was referred back to the General Court in 2023 for further judgement, the review proceeding led to nearly ten years of administrative and judicial effort. In a dynamic market segment such as the one of mobile telecommunications, one can assume how much the underlining incentives of an acquisition may have changed during this timeframe.

This duration is higher than usual for EU merger review proceedings and it can be justified, at least in part, by the complexity of CK Telecoms' and O2's transaction. Nonetheless, it inevitably raises the question of whether EU courts can improve their *modus operandi* to provide greater legal certainty for innovation in technology-driven markets, since lengthy merger review proceedings tend to entrench market initiatives[28].

c) The arguments at stake

As indicated in section 1, this paper focuses on a specific aspect of the CK Telecoms case, meaning other relevant aspects are left for further research. Even though, in order to have an overview of the issues raised by the Commission to the ECJ and clearly set which pleas involve the relation between competition and innovation, table 1 below maps the Commission's appeal allegations, as systematized by the ECJ's judgment method (*i.e.*, dividing ground of appeals into parts). Despite not necessarily being the most didactic way of approaching the appeal allegations, sticking to the court's methodology allows for a better interpretation of what the EU-level judges interpreted.

Table 1 – Summary of the Commission's grounds of appeal in the CK Telecoms case

Ground of appeal	Parts	Summary of issue raised by the Commission
1st	*n/a*	Whether the General Court applied an excessively high standard of proof for the control of concentrations; specifically, if there should be a presumption of compatibility or incompatibility of a transaction with the EU's internal market.
2nd	*First part*	Whether dominance is necessary for a concentration to be blocked or restricted by the Commission.

[28] This risk helps one understand why many jurisdictions worldwide impose a mandatory deadline for merger review proceedings, after which the transaction is automatically cleared. The same rationale of fast-paced proceeding should apply to judicial review of merger control decisions.

	Second part	Whether anticompetitive effects depend on both (i) the elimination of the important competitive constraints that the merging parties had exerted upon each other and (ii) a reduction of competitive pressure on the remaining competitors.
3rd	*First part*	Whether the General Court exceeded the limits of its judicial review by providing its own economic assessment of the concepts of "important competitive force" and "close competitors".
	Second part	Whether the General Court misinterpreted the concept of "important competitive force" and distorted the Commission's decision and defence when doing so.
	Third part	Whether the General Court misinterpreted the concept of "close competitors" by requiring that the parties should have been "particularly" close.
	Fourth part	Alternative allegation that was not examined by the ECJ because the second and third parts of this ground of appeal were upheld.
4th	*First part*	Whether the General Court's view about price increase post-transaction was accurate and whether it also misinterpreted the Commission's view about the subject.
	Second part	Whether the General Court was correct in demanding the Commission to presume "standard" efficiencies from the transaction.
5th	*n/a*	Whether the General Court analysed only some of the factors assessed by the Commission to analyse the effects of the transaction.
6th	*First part*	Whether the General Court was correct in saying that the Commission did not assess the parties' supposed incentives to diminish the quality of their own network post-transaction.
	Second part	Whether the General Court raised a complaint in its own motion concerning the lack of timeframe established by the Commission to analyse the potential effects of the transaction.

Source: Author's creation

For the purposes of this paper, the relevant issues are the fifth and sixth grounds of appeal, as well as the second part of the third ground of appeal. Namely, what most matters for the relation between competition and innovation are the EU courts' diverging views about the concept of "important competitive force", the factors they considered sufficient to assess the effects of the transaction, and the effects of the transaction on the parties' and their competitors' incentives to invest in their network infrastructure – *i.e.*, to innovate, as detailed in section 2 above.

i. Debate on "important competitive force"

Regarding the concept of "important competitive force", its relevance resides on the fact that the EU Merger Regulation defines that the Commission can block or impose restrictions to a proposed transaction when it raises a "significant impediment to effective competitive" (article 2(3) and recital 25), while the Horizontal Merger Guidelines of the Commission provides that one of the ways to assert such impediment is finding that the transaction eliminates an "important competitive force" of the market (recitals 37 and 38). One of the grounds used by the Commission to block the transaction was its view

that CK Telecoms was a key player that fulfilled the role of an important competitive force in the UK retail market for mobile telecommunications[29].

During the review proceeding in the Commission, the parties contested the Commission's perspective that CK Telecoms incurred in such classification, as manifested in the statement of objections issued by the Commission. However, the Commission reasoned that, to be an important competitive force in the market, one does not have to "[stand] out from its competitors in terms of its impact on competition" or be a recently entered player who innovates aggressively and challenges the status quo of the incumbents. The Commission used various criteria to qualify CK Telecoms as an important competitive force, including the evolution of CK Telecoms' market share over the years (in terms of revenue and subscriber base), the introduction of "innovative and disruptive products" in the retail market, such as the first video calling service, and a price-aggressive approach[30].

The General Court took the view that such a definition of an important competitive force – in which a competitor does not necessarily have to stand out – is too broad and would allow the Commission to challenge any transaction taking place in an oligopolistic market, since, due to the small number of players, every player exerts some competitive pressure over its competitors. The General Court viewed the Commission's concept as inadequate in a way that the Commission would be faced with an excessively low standard of proof to challenge transactions in its merger review jurisdiction, thus, infringing the principle of legal certainty[31]. For the General Court, therefore, the Commission could only challenge a transaction under the concept of "important competitive force" if it proved that the involved party stood out among market players and exerted important competitive constraint[32]. Without these singular characteristics, a player could well be a competitive force, but not an "important" one for means of finding a significant impediment to competition and, therefore, challenging a transaction, according to the General Court[33].

The ECJ, in turn, disagreed with the General Court that the concept adopted by the Commission would allow it to challenge any transaction in an oligopolistic market. On the contrary, the ECJ concluded that requiring such from the Commission would impose an excessively high burden of proof and, thus, harm EU competition law's goal of preventing significant impediments to effective competition through merger review. The ECJ argued that the "effectiveness" of the EU Merger Regulation depended on the Commission being able to block mergers with potentially anticompetitive effects, which, to its view, would be too burdensome if the Commission had to prove that a player stands out and is "particularly aggressive"[34]. This was, thus, a divergence between the EU courts about the applicable standard of proof

[29] Commission's decision (n 23) paras 474-681.
[30] Commission's decision (n 23) para 326.
[31] General Court's decision (n 2) paras 172-175.
[32] Ibid. para 168: "(…) for an undertaking to be classified as an 'important competitive force', it must stand out from its competitors in terms of its impact on competition, in that it plays a unique role in the market enabling it to exert disproportionately strong constraints on the other players compared to its market share that is indispensable for the preservation of effective competition."
[33] For the General Court, the Commission did not reach the applicable standard of proof because CK Telecoms' growth of market share and consumer base over consecutive years under the dominant position threshold is insufficient to qualify it as an important competitive force. In terms of pricing, the General Court acknowledged that CK Telecoms' offers were cheaper in some segments, but it argued that those prices (such as 4G zero-price offers) were "not sufficient to prove that [CK Telecoms] was pursuing a particularly aggressive pricing policy". General Court's decision (n 2) paras 195, 212-216.
[34] ECJ's decision (n 2) paras 161-162: "In that context, it must be held that the requirements for classifying an undertaking as an 'important competitive force' (…) should not be such as to preclude the Commission from declaring incompatible

over the Commission – whether a player must "stand out" and be "particularly aggressive" to be qualified as an "important competitive force".

Furthermore, the ECJ and the General Court did not only disagree about the standard of proof – *i.e.*, whether the Commission should prove that the competitor stands out among other players. The EU courts also disagreed about the concept of an important competitive force. The weight of innovation to define an important competitive force was one of the points of disagreement between the courts. According to the ECJ, the General Court focused its analysis over CK Telecoms' role in the UK retail market for mobile telecommunications on its price policies and its pressure over competitors' prices. The ECJ contested that view as too strict and limited over the true dynamics of the competition in that telecommunications market. The ECJ adopted a broader concept of "important competitive force", encompassing not only price, but, also, quality and innovation[35]. Therefore, under the ECJ's view, a player can be considered an important competitive force if it exerts competitive pressure over competitors in the form of quality and innovation, even if that does not immediately translate into price competition.

This divergence between the EU courts reveals a disagreement about the role of innovation in the competitive process. While the General Court focused its analysis on price, the ECJ interprets innovation as a mean of competitive force. Even if the General Court saw innovation as a form of competitive pressure over competitors, it, at most, assumed that innovation integrates a market player's pricing decisions and, thus, such pressure would translate into price competition[36].

Putting this debate simply, "A" does not reduce its prices to the level of pressuring "B" to do the same, but "A" invests heavily in its network infrastructure and creates efficient ways to manage radiofrequency spectrum. From the ECJ's perspective, the innovation provided by "A" pressures "B" to improve its own network, even if prices remain the same or change irrespective of "A"'s pricing decisions.

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with the internal market concentrations which could give rise to significant non-coordinated effects and, consequently, significantly harm effective competition. If that were not the case, the full effectiveness of Article 2(2) and (3) of Regulation No 139/2004 and, in particular, the practical effect of those provisions could becalled into question. In that regard, the fact that a party to a concentration on an oligopolistic market does not stand out from its competitors by being 'particularly aggressive' in terms of price does not mean that a concentration to which such an undertaking is a party could not alter the competitive dynamic to a significant and detrimental extent. It is common ground that merger control seeks precisely to examine how a concentration could alter the factors determining the state of competition on a given market in order to ascertain whether the concentration would result in a significant impediment to effective competition, without it being decisive in that regard that an undertaking covered by that concentration is a 'particularly aggressive' undertaking on that market."

[35] Ibid. paras 165-166: "Lastly, price is often not the only important parameter for assessing competitive dynamics, in particular in differentiated product markets in which quality and innovation could play a key role in the positioning of the products concerned. Therefore, an exclusively price-focused approach for the purposes of classifying an undertaking as an 'important competitive force' would necessarily be incomplete. Therefore, the concept of 'important competitive force' cannot be applied exclusively to undertakings which compete particularly aggressively in terms of price and which force their competitors on the market to align with their prices or to undertakings whose pricing policy is likely to alter significantly the competitive dynamics of the market concerned."

[36] The General Court did not completely disregard innovation to form a concept of an important competitive force, since it mentioned that CK Telecoms' disruptive approach was insufficient to qualify it as such a force because it was "historical in nature", since it occurred in earlier years of the company and was not proved by the Commission to still have existed when the transaction was filed. However, it still interpreted innovation as a variable necessarily translated into pricing policies. General Court's decision (n 2) para 224: "Even if the Commission's line of argument concerning Three's historic role were as such correct, (…), the Commission has failed to establish in the contested decision that Three's historic role was representative of its pricing policy at the time that the concentration was notified. The Commission's reasoning in that regard seems to imply that an undertaking which has historically played a disruptive role will necessarily play the same role in the future and cannot reposition itself on the market by adopting a different pricing policy."

From the General Court's perspective, apparently, "A" could only be considered an important competitive force if its innovation reduced its prices to consumers. The question, in the end of the day, is whether competition can take place in an aspect beyond price[37].

When looking into the narrative provided in the Commission's decision about CK Telecoms' market practices, one notices the concept of innovation adopted by the ECJ. To qualify CK Telecoms as an important competitive force, the Commission mentioned the introduction of unparallel mobile telecommunication services to non-business consumers by CK Telecoms in the mid-2000s and early 2010s, when 3G technology was being deployed – most of all, though not the only innovation mentioned by the Commission, the offer of internet-based videocall and voice call services (technically known as Voice over Internet Protocol – VoIP) without charge over the consumer's data allowance and the offer of unlimited data usage in the time when smartphones began to be widely adopted by consumers[38]. The other MNOs began to offer similar deals to consumers after CK Telecoms as a competitive reaction. For the Commission, CK Telecoms' offers favoured the increase of use of VoIP platforms and smartphones.

In addition, the Commission also remarked CK Telecoms' resilient approach to overcome difficulties after its entry in the UK retail market, including the decision to partner with a music content provider, the launching of differentiated digital services, and the execution of the network sharing joint venture MBNL with competitor EE[39]. In summary, although the low-cost aspect of the services mentioned by the Commission may suggest that the concept of innovation is linked to price, the Commission did not focus its analysis on price, but on the unprecedented nature of the services introduced by CK Telecoms and the resulting reaction from competitors across the market (again, not only in price reduction, but in change of service design and enabling development of ancillary markets). This perspective is reinforced by paragraph 1080 of the Commission's decision, where, although it did not provide a concept of innovation, it exemplified it by mentioning innovation as "additional services, innovative tariffs, technology upgrades"[40].

Since the ECJ upheld the Commission's ground of appeal on the standard to find an "important competitive force", it can be assumed that the ECJ adopted the same concept of innovation and its effects on competition as the Commission and, thus, a different one from the General Court. However, neither the ECJ nor the General Court explored these aspects of CK Telecoms' operation in the market – *e.g.*, entry strategies and innovative services. Therefore, in addition to the divergence between the ECJ and the General Court on the concept and effects of innovation, there was a difference of approach or emphasis to innovation between the Commission and the EU courts.

ii. Debate on network sharing agreements

Beside the concept of an important competitive force and the standard of proof applicable to it, the EU courts also disagreed on the standard of proof applicable to assert the effects of the transaction in

[37] It is worth highlighting that legal and economic literature about zero-price markets in the digital era argue that competition can take place beyond price. In this sense, *e.g.*, John Newman, 'Antitrust in zero-price markets: foundations' [2015] 164 University of Pennsylvania Law Review 149-206.

[38] Commission's decision (n 23) paras 491-522.

[39] Ibid. paras 489-490.

[40] Ibid. para 1080: "One other aspect that the Commission has investigated is whether the non-MNOs are able to compete on the same level as the MNOs as regards innovation (additional services, innovative tariffs, technology upgrades) and whether they have the ability to differentiate their offers as compared to those of the other players in the retail market for mobile telecommunications."

the parties' and their competitors' incentives to innovate. Starting from the Commission, it argued that the acquisition would diminish the parties' and their competitors' incentives to innovate because the reduction of number of MNOs to only three would both reduce the competitive pressure among them and enhance transparency of network investment to an anticompetitive level – *i.e.*, the parties and their competing MNOs (BT and Vodafone) would have such a clear view of each other's investments in network infrastructure that they would simply invest according to their competitors' actions, favouring inaction.

Such concerns include one MNO reducing its investments in network infrastructure based on its perception of its competitors' level of investment or simply waiting for its competitors to initiate new investments in order for it to initiate its own. Since, as seen in section 2 above, investment in network infrastructure is a key competition variable in mobile telecommunications markets, any decrease of incentives to innovate in this aspect amounts to a harm to competition and, thus, to general wellbeing.

On one hand, the General Court concluded that the Commission did not analyse these effects toward the parties – *i.e.*, whether they would degrade their own network/stop innovating due to loss of competitive pressure in the post-acquisition scenario[41] – and that the Commission erred in law by not providing sufficient proof of such an effect over the competitors[42], as well as by not turning explicit the timeframe that it took into consideration to forecast the transaction's effects over competitors' incentives to innovate[43].

However, when doing so, the General Court did not assert precisely how much would the proposed acquisition impact the market players' incentives to innovate. It only asserted that the Commission did not reach its standard to prove those effects and, therefore, those effects cannot be presumed in disfavour of the parties' transaction. In addition, the General Court also remarked two important aspects about the relation between competition and innovation (though not explicitly through this lens).

Firstly, the General Court remarked that, in the context of competition law, assessing quality (a concept indissociable from innovation in a technology-driven market such as mobile telecommunications) is "often a complex and imprecise exercise" that requires a case-by-case approach, especially in what the court mentioned as "high-technology industries"[44]. Indeed, this is consistent with the forward-looking approach of merger review and the uncertainty intrinsic to it, as remarked in section 1 above.

Secondly, the court argued that a reduction in the number of MNOs from four to three does not necessarily make the transaction anticompetitive, since, on one hand, it could lead to price increase, but, on the other hand, it could also increase incentives to invest in network infrastructure (thus, more innovation)[45]. In other words, the General Court did see the possibility of the transaction to favour innovation instead of diminishing it, contrary to the Commission's view. Additionally, it demonstrates that the General Court did not see 4-to-3 transactions as a magic number, demanding a case-by-case analysis to assert whether the reduction to three players in the market is overall beneficial or restrictive to competition.

[41] General Court's decision (n 2) paras 358-361.
[42] Ibid. paras 367-369 (in relation to BT) and paras 388-389 (in relation to Vodafone).
[43] Ibid. paras 408-410.
[44] Ibid. para 390.
[45] Ibid. paras 280 and 373.

The ECJ, in the judgment of the Commission's appeal, reached different conclusions about the effects of the merger and the standard of proof applicable to the Commission. The ECJ concluded that the General Court misinterpreted the Commission's decision, because the Commission did, in fact, analyse the unilateral effects of the transaction over the Parties' incentives to innovate[46]. In addition, the ECJ concluded that the General Court adopted an excessively high burden of proof for the Commission in relation to the effects of the transaction over competitors' incentives to innovate. Finally, about the General Court's reasoning according to which the Commission had failed to set the timeframe that it had taken into consideration to forecast the effects of the transaction, the ECJ remarked that this was not an issue raised by CK Telecoms in the action for annulment nor a matter of public policy, meaning the General Court could not have raised it during its judgment[47].

In summary, the ECJ, like the General Court, did not assert the effects of the transaction to the Parties' and competitors' incentives to innovate. It only defined what the Commission had analysed, asserted the standard of proof applicable to the Commission, and affirmed the General Court had raised an issue out of the scope of judicial review, referring the case back to the General Court for new judgement. This shows how the judicial review proceeding of the CK Telecoms case barely explored the concept of innovation and its relation with competition.

An additional, though not self-standing, method to verify the level of assertion of a court decision in regard to a certain issue is the recurrency of references to keywords related to that issue. Naturally, this is a method that bares its own limitations because it is a purely quantitative approach and is based on chosen keywords that do not necessarily exhaust the issue at hand. In other words, an issue can be approached in different forms, so counting how many times a few keywords were mentioned does not assure that that issue was not explored. However, when the keywords are sufficiently broad and this method is supported by complementary ones, it serves as a useful tool to measure a court's approach.

For this paper, keywords related to innovation were tracked and mapped in the decisions issued by the three EU bodies (Commission, General Court and the ECJ) based on electronic automation[48]. The search results reveal a sharply higher recurrency of reference to innovation-related keywords in the Commission's decision than in the General Court's or the ECJ's. While the Commission referenced these terms in 46 occasions, the General Court did so in six occasions and the ECJ, in five. Although one could argue that this difference can be explained by the fact that the Commission's decision is much longer than the courts' decisions, the difference is still proportionally significant and the lack of attempt by the courts to assert the effects of the transaction over the parties' incentives to innovate confirms an asymmetry between the Commission and the courts in the approach to innovation.

[46] ECJ's decision (n 2) paras 309-310.

[47] Ibid. paras 332-335.

[48] The keywords that were used as inputs for the electronic automated tracking were "innovation", "innovator", "innovative", "innovate", and "innovating", with their respective plural variables included. To limit the mapping of the search terms to what one could define as organic use (*i.e.*, their use as part of the content of the decision), the tracking disregarded the use of these terms in the summary table of the decisions while it included footnotes and excerpt transcripts. Additionally, use of these terms for purely procedural purposes – specifically, the parties' argument that the Commission used an innovative theory of harm – was also disregarded. In that way, the uses of the terms tracked referred solely to market innovation.

4. Implications of legal standards

As detailed in the previous section, the judgment of the CK Telecoms case was partially driven by a divergence of perspectives between the EU courts on the concept of innovation and its relation with competition. Meanwhile, this divergence was either unclear or kept implicit during the judgement. The reason for that goes beyond what this paper seeks to demonstrate. The main issue is the implications of such judicial approach to innovation. The legal issue is simpler than it may appear. Behind the debates of assessments of competition and network sharing agreements, the issue is the quality of court decision-making when a relevant divergence between courts is not explored in a judgement, which took place in the CK Telecoms case, as demonstrated in section 3 above.

Developing case-law based on a case's judgement involves, among other efforts, identifying alternative approaches that would have been more favourable to legal certainty. This is a usually slow process based on wide debate (commonly among law experts) and revisits from the court itself, especially because law is not an exact science and a case can be approached in multiple ways without any of which being necessarily wrong. In other words, extracting prospective lessons for court decision-making based on a specific judgement demands various steps. In regard to the CK Telecoms case, a first step for competition case-law – mainly on the EU, but also applicable to other jurisdictions – is acknowledging the insufficient awareness to the divergence about the concept of innovation and its relation with competition. Despite the detailed approach adopted by the EU courts in the CK Telecoms case and the fact that leaving some aspects unexplored can be interpreted as a form of preserving the Commission's zone of discretion[49], the courts – especially the ECJ as a court of last instance – could have used this opportunity to set a clearer concept of innovation and its effects on competition.

This loss of opportunity, though not necessarily detrimental to the rights of the parties of the case, mitigates the EU courts' role in providing better legal certainty and shaping competition law. Although this role could be applicable to most jurisdictions with consolidated competition rules, it is particularly relevant for the EU, in which the CK Telecoms case is inserted. This is so for two reasons. Firstly, the well-functioning of the EU's internal market, where there is free movement of people, goods, and services, demands a well-functioning set of competition rules[50]. Secondly, EU courts have traditionally had a central role in promoting a law-based integration between European Member States, as widely perceived by scholars[51].

Given the importance of innovation as a driving goal and standard of competition policy as presented in section 1 above, losing the opportunity of clarifying the judgement's underlying concept of innovation (or innovative player) and its relation with competition is a form of mitigating the EU courts' described role. Recent research indicates that the lack of a theory of innovation – *i.e.*, a theory of how

[49] Such interpretation of the EU courts' approach is consistent with the role EU courts have played over the last decades in the telecommunications sector, especially in the post-liberalisation period of the 1990s and 2000s, particularly by guaranteeing a significantly wide area of discretion for the Commission to protection competition in the sector. Alexandre de Streel, 'The antitrust activism of the European Commission in the telecommunications sector' in P. Lowe and M. Marquis (eds) *European Competition Law Annual 2012: competition, regulation and public policies* (Hart 2014) 204-206.

[50] David Edward and Robert Lane, *Edward and Lane on European Union law* (Edward Elgar Publishing 2013) 724.

[51] *E.g.*, Robert Schütze and Takis Tridimas, *Oxford principles of European Union law: The European Union legal order* (volume 1, OUP 2018) 581-2; Catherine Barnard, 'Introduction: The Constitutional Treaty, the constitutional debate and the constitutional process' in Catherine Barnard (ed), *The fundamentals of EU law revisited: Assessing the impact of the constitutional debate* (OUP 2007) 2-4; Alec Stone Sweet, *The judicial construction of Europe* (OUP 2004).

innovation drives and is driven by competition – is present across the case-law of the EU courts[52], thus suggesting that this approach is not limited to the CK Telecoms case. The lack of clarity in case-law is, essentially, a lack of clarity in the law, since a relevant (if not the most relevant) source of law is court decision-making, given the intrinsic indeterminacy of law as provided by the legislator[53]. Far from only a theoretical relevance, EU case-law is used as a guiding standard by lawyers to provide legal opinions to market players.

At the current stage of deployment of 5G and, to some extent, 6G technology, where high investments are demanded for high social and economic benefits under inevitable market risk, a court's loss of opportunity to provide greater legal certainty is a potential gap to competition law. Moreover, when two courts disagree about a key legal aspect of a case, but hardly give any projection to that divergence, an opportunity for case-law development, as described above, is lost.

Finally, a long-term risk of such a judicial approach, if used repeatedly, is some level of loss of legitimacy. Since effective dialogue between courts is a way to provide and maintain a concise legal order besides just concise legal reasoning, an unclear dialogue between courts can put legal consistency at risk and undermine judicial legitimacy, a central building block of EU law in general and EU competition law in specific.

5. Concluding remarks

Identifying the effects of a merger or conduct over innovation and, thereof, on competition is not a new challenge to competition agencies and courts. However, the CK Telecoms case required EU courts to revisit this challenge by basic legal questions. The singularities described in section 2 bring new nuances to this debate under the context of new generation of mobile communication technology. On one hand, market players must comply with high investments in network infrastructure to achieve the expected level of social and economic benefits arising from new generation technology – due to the higher radiofrequency band of electromagnetic waves used for this new technology, the investments must be higher than in legacy generations. On the other hand, this market segment is marked by high barriers to entry and a history of antitrust investigations. Despite this new context, the underlying challenge of assessing the interface between competition and innovation remains essentially the same.

This challenge is, by far, not subject to consensus, as academic literature demonstrates. However, when faced with the opportunity to address this matter in the CK Telecoms case, the EU courts focused their legal reasoning on vocabulary and standards of proof applicable to the Commission's merger review jurisdiction. While this approach may be understood as an attempt to limit the judicial review activity and preserve the Commission's zone of discretion, it actually left a gap in the formation of EU competition case-law. Finding the motives for such an approach exceeds the purposes of this paper and, indeed, there may be legitimate ones, as a court can rule a case in different forms. As all jurists know, law is commonly indeterminant, legal questions are hardly binary, and the variability of solutions based on case-specific context opens room for different plausible judgements.

[52] Thibault Schrepel, 'A systematic content analysis of innovation in European competition law' [2023] *Amsterdam Law & Technology Institute working paper* 2-2023 <https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4413584> accessed 10/11/2023.

[53] The precise room of discretion for courts in deciding cases varies per norm applicable to the litigation and jurisdiction, but some scholars, such as Stone Sweet (n 48, 9-12), go as far as describing it as "judicial lawmaking".

In the CK Telecoms case, despite the essential standards set therein, potentially making it a leading case for future jurisprudence, the EU courts refrained from acknowledging and exploring a key source of divergence between them, namely, the concept of innovation and its effects on competition, as described in section 3. While the General Court limited its analysis of an "important competitive force" to price competition, the ECJ adopted a broader concept and included innovation as a form of competitive pressure suitable to identify a loss of effective competition as basis to block a merger. However, when asserting whether the Commission achieved its standard of proof on the effects of the transaction, neither the General Court nor the ECJ provided their views about the transaction's effects to innovation (one of the key controversies in the case), their underlying concept of innovation and the extent to which competition favours innovation. This approach was far different from the one adopted by the Commission, which attempted to provide a concept of innovation and explored CK Telecoms' practices through the lens of reciprocal effects between competition and innovation.

This judicial approach has potential implications under the perspective of judicial governance and judicial policymaking. For legitimacy, law demands consistency, and, for optimised consistency, a court needs to dialogue with its Judiciary counterparts as well as unfold key divergences of legal interpretation it may have. Without this type of judicial approach, key controversies receive less attention and, therefore, case-law risks being inconsistent. This is why the uncertainty of the relation between competition and innovation can only be adequately addressed under a dialectical judicial review, where courts unfold underlying divergences of concepts and dialogue between themselves to enhance chances of future case-law consistency. The judgement of the CK Telecoms case was not necessarily inconsistent – on the contrary, most of its conclusions were reasoned on the court's own case-law. However, finding this was not under this paper's scope. The point is what this judgement leaves for future cases. When leaving many of the important standards the ECJ set on this case aside and focusing only on the interface between innovation and competition, the conclusion is that EU courts have a road ahead and must pay attention to the risk of not being inconsistent until clear takeaways are provided in the case-law.

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