F A C U L T Y O F L A W

L U N D U N I V E R S I T Y

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# Interoperability in EU Competition Law

## Rethinking the Essential Facilities Doctrine for Digital Platforms after *Android Auto*

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# Summary

This thesis explores how EU competition law governs interoperability obligations for dominant digital platforms. It shows how the CJEU's judgment in *Android Auto* (C-233/23) redefines the Essential Facilities Doctrine (EFD) established in *Bronner* judgment (C-7/97) and how this emerging doctrine interacts with the interoperability obligations introduced by the Digital Markets Act (DMA).

The *Android Auto* judgment marks a shift in the application of the EFD to digital platforms. The Court held that a refusal to enable interoperability may constitute an abuse of dominance under Article 102 TFEU even where the infrastructure is not indispensable, provided the platform is designed for third-party participation. By shifting focus from indispensability to attractiveness, and from the elimination of competition to the capability to hinder it, the Court lowered the strict *Bronner* criteria and moved beyond the traditional limits of the EFD. Furthermore, by recognising that a dominant undertaking may be required not only to grant access but also to develop interoperability templates where none exist, the Court brought antitrust enforcement through Article 102 TFEU closer to the preventive logic of regulation.

As this thesis demonstrates, the *Android Auto* judgment allows for both narrow and broad readings. A narrow interpretation confines the doctrine to app-level interoperability and digital platforms open to third parties, whereas a broader one could extend obligations beyond digital platforms strictly defined, potentially requiring dominant undertakings to create access templates for a broader range of infrastructures. Such an expansion risks blurring the line between 'exceptional' refusal to supply cases and general exclusionary abuses, and raises concerns about investment incentives, innovation and the scope of the fundamental right to property and the freedom to conduct a business.

The Court's development takes place against the backdrop of the DMA, adopted to address the structural limitations of Article 102 TFEU in dealing with platform power. Whilst the DMA imposes interoperability obligations *ex ante* on designated gatekeepers, *Android Auto* now establishes similar duties through *ex post* competition law. As a result, the duty to ensure interoperability now operates within three overlapping frameworks comprising the DMA, the EFD and the emerging *Android Auto* doctrine. This overlap enhances flexibility and may help close enforcement gaps, but it also risks introducing legal uncertainty, double proceedings and threatens business freedom. Ultimately, this convergence reflects a broader evolution of EU competition policy towards a more integrated, though complex, framework for promoting openness, innovation and contestability in digital markets.

# Sammanfattning

Denna uppsats undersöker hur EU:s konkurrenslagstiftning reglerar interoperabilitetsskyldigheter för dominerande digitala plattformar. Uppsatsen visar hur EU-domstolens avgörande i *Android Auto* (C-233/23) omformar teorin om nödvändiga nyttigheter (Essential Facilities Doctrine, EFD) som etablerades i *Bronner*-domen (C-7/97). Vidare analyseras denna framväxande doktrins samspel med de interoperabilitetsskyldigheter som införts genom förordningen om digitala marknader (Digital Markets Act, DMA).

Domen i *Android Auto* markerar ett skifte i tillämpningen av EFD på digitala plattformar. Domstolen slog fast att en vägran att möjliggöra interoperabilitet kan utgöra ett missbruk av dominerande ställning enligt artikel 102 FEUF även när infrastrukturen inte är oumbärlig, under förutsättning att plattformen är avsedd för utomstående företag. Genom att flytta fokus från oumbärlighet till attraktivitet, och från eliminering av konkurrens till möjligheten att hindra den, sänkte domstolen de strikta kriterierna i *Bronner* och gick bortom EFD:s traditionella ramar. Vidare konstaterade domstolen att ett dominerande företag i vissa fall kan vara skyldigt inte bara att ge tillgång, utan även att utveckla interoperabilitetsmallar där sådana saknas. På så sätt förde domstolen konkurrensrättslig rättsskipning enligt artikel 102 FEUF närmare den förebyggande logik som präglar förordningar.

Som uppsatsen visar tillåter *Android Auto*-domen såväl restriktiva som extensiva tolkningar. En restriktiv tolkning begränsar doktrinens tillämpning till interoperabilitet på app-nivå och digitala plattformar öppna för utomstående part, medan en mer extensiv tolkning kan utvidga skyldigheterna bortom digitala plattformar i strikt mening, och kräva att dominerande företag skapar tillgångsmekanismer för ett bredare spektrum av infrastrukturer. En sådan utvidgning riskerar att sudda ut gränsen mellan de ”exceptionella” fallen av leveransvägran och allmänna utestängande missbruk, och väcker frågor om investeringsincitament, innovation samt de grundläggande rättigheterna till egendom och näringsfrihet.

EU-domstolens utveckling sker mot bakgrund av DMA, som antagits för att hantera begränsningarna med att reglera plattformsmakt genom artikel 102 FEUF. Medan DMA inför *ex ante*-skyldigheter för utsedda grindvakter, stipulerar *Android Auto* nu liknande ansvar genom rättskipning *ex post*. Skyldigheten att säkerställa interoperabilitet verkar således numera över de tre parallella ramverken DMA, EFD och den framväxande *Android Auto*-doktrinen. Denna överlappning ökar flexibiliteten och kan täppa till luckor i rättstillämpningen, men riskerar samtidigt rättsosäkerhet, dubbla förfaranden och inskränkningar i näringsfriheten. Sammantaget speglar denna konvergens en bredare utveckling inom EU:s konkurrenspolitik mot ett mer integrerat, men samtidigt alltmer komplext, ramverk för att främja öppenhet, innovation och konkurrens på digitala marknader.

# Preface

This thesis marks the end of my five years of studies at Lund University. It has been a rewarding journey, both academically and personally.

I extend my sincere gratitude to the professors of the Master's programme in European Business Law for their dedication and passion in making EU law truly engaging during these past two years. I am particularly grateful to my supervisor, Radu Mares, for his guidance and support throughout this research.

Det allra största tacket riktas till min familj och alla fina vänner jag funnit längs vägen!

Lund, May 2025

*Hanna Ebenhardt*

# Abbreviations

| | |
|---|---|
| AG | Advocate General |
| AGCM | Autorità Garante della Concorrenza e del Mercato (The Italian Competition Authority) |
| CFR | Charter of Fundamental Rights of the European Union |
| CJEU or the Court | Court of Justice of the European Union |
| Commission | European Commission |
| CPS | Core Platform Service |
| DMA | Digital Markets Act |
| DSA | Digital Services Act |
| EFD | Essential Facilities Doctrine |
| EU | European Union |
| GAFAM | Google (also Alphabet), Apple, Facebook (also Meta), Amazon, Microsoft |
| GC | General Court |
| OECD | Organisation for Economic Co-operation and Development |
| TEU | Treaty on European Union |
| TFEU | Treaty on the Functioning of the European Union |

# 1 Introduction

## 1.1 Background

For decades, the fundamental freedom to conduct business and the protection of property rights have served as key principles in EU competition law.[1] The balance between these rights has been central in the case law on abuses of dominance, particularly refusals to supply under the EFD. In landmark cases such as *Bronner*[2], the Court of Justice of the European Union (CJEU) set strict conditions before a dominant undertaking can be compelled to grant access to its infrastructure: the input must be indispensable and the refusal likely to eliminate all competition. These high thresholds were designed to safeguard investment incentives and minimise interference with economic freedoms, permitting intervention only in exceptional cases.[3]

However, the digital economy has rapidly transformed the competitive landscape. Today, a handful of large platforms act as de facto gatekeepers to core platform services. These platforms not only participate in the market but also shape it, often controlling critical infrastructure necessary for downstream innovation and competition.[4] Concerns have been raised over the fact that some digital platforms may establish their dominance to the detriment of existing and potential competitors. This mirrors the monopolistic power once held by public utilities such as the railroads and industrial trusts that led to the introduction of the Sherman Act in the United States in the late nineteenth century, thereby introducing competition as a legal phenomenon and laying the foundations of modern antitrust law.[5]

The growing market power and anti-competitive conduct of digital platforms have given rise to a global wave of reports and policy initiatives, all calling for the modernisation of competition law and greater international cooperation to address the unique challenges of the borderless digital economy.[6] The EU's response to this includes, among other measures, the Digital Markets

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[1] Case C-238/87 *Volvo v Veng*, EU:C:1988:477, paras 8 and 9.

[2] Case C-7/97 *Oscar Bronner v Mediaprint Zeitungs- und Zeitschriftenverlag GmbH & Co. KG (Bronner)* EU:C:1998:569.

[3] Jacques Crémer, Yves-Alexandre de Montjoye and Heike Schweitzer, *Competition Policy for the Digital Era, Final report* (European Commission, Directorate-General for Competition 2019) ISBN 978-92-76-01946-6; Case C-7/97 *Bronner*, Opinion of AG Jacobs, paras 56 and 57.

[4] Richard Whish and David Bailey, *Competition Law* (11th edn, OUP 2024), p. 1119 f.

[5] Whish and Bailey (2024), p. 1118; See further E Thomas Sullivan and Jeffrey LH Harrison, *Understanding Antitrust and Its Economic Implications* (7th edn, Carolina Academic Press 2019).

[6] Whish and Bailey (2024), p. 1119; See e.g. Autorité de la concurrence, G7 Competition Authorities, 'Common Understanding and the Digital Economy' (18 July 2019) <https://www.autoritedelaconcurrence.fr/en/communiques-de-presse/g7-common-understanding-competition-and-digital-economy> accessed 30 March 2025; Digital Competition Expert Panel, Unlocking Digital Competition: Report of the Digital Competition Expert Panel (UK Government, 2019) ISBN 978-1-912809-44-8.

Act (DMA),[7] which imposes *ex ante* obligations on designated gatekeepers to preserve contestability and fairness in the market.[8] Among these are interoperability obligations, requiring gatekeepers to allow third-party app stores, enable sideloading, and ensure access to key operating system and hardware functionalities.[9] Interoperability has long been seen as central to restoring competition in digital markets, where strong network effects, lock-in, and vertical integration allow a few large platforms to act as essential gateways between businesses and consumers. By lowering entry barriers, enabling multi-homing, and promoting contestability within and across platforms, interoperability aims to rebalance these ecosystems and curb gatekeeper control.[10]

In line with this march towards digital platforms, not long after DMA's full implementation, the Court signalled a major shift in its jurisprudence. In early 2025, the *Android Auto* case[11] was decided by the CJEU, ruling that a dominant firm's refusal to enable interoperability with its platform may constitute abuse under Article 102 in the Treaty on the Functioning of the European Union (TFEU)[12] even if the platform is not indispensable, provided it is designed for third-party use and the conduct is capable of hindering competition.[13]

The evolution of EU competition law in the digital era, in its approach to dominant digital platforms and interoperability obligations, has paved the way for this thesis. Building on this development, this thesis will look into how the *Android Auto* judgment reshapes the application of Article 102 TFEU in refusal to supply cases, how it fits within the evolution of the EFD, and how it interacts with the parallel regime of the DMA. In doing so, it helps understand how the EU is reworking its legal thinking in response to platform dominance in digital markets.

[7] Regulation (EU) 2022/1925 of the European Parliament and of the Council of 14 September 2022 on contestable and fair markets in the digital sector and amending Directives (EU) 2019/1937 and (EU) 2020/1828 (2022) OJ L265/1 (Digital Markets Act, DMA).
[8] Article 1 and Recital 7 DMA.
[9] Giuseppe Colangelo and Alba Ribera Martinez, 'Vertical Interoperability in Mobile Ecosystems: Will the DMA Deliver (What Competition Law Could Not)?' (2025) 83 International Review of Law and Economics <https://ssrn.com/abstract=4826150> accessed 29 March 2025, p. 2; Article 6(4) and 6(7) DMA.
[10] Colangelo and Ribera Martinez (2025), pp. 2 and 3; Fiona M Scott Morton, Gregory S Crawford, Jacques Crémer, David Dinielli, Amelia Fletcher, Paul Heidhues, Monika Schnitzer, 'Equitable Interoperability: the "Supertool" of DIgital Platform Governance' (2023) Yale Journal on Regulation, pp. 1013-1055 <http://hdl.handle.net/20.500.13051/18329> accessed 16 March 2025.
[11] Case C-233/23, *Alphabet Inc. and Others v Autorità Garante della Concorrenza e del Mercato (AGCM) (Android Auto)*, EU:C:2025:110.
[12] Consolidated version of the Treaty on the Functioning of the European Union (2012) OJ C326/01 (TFEU).
[13] Case C-233/23 *Android Auto*, paras 52 and 61.

## 1.2 Purpose and Research Questions

The purpose of this thesis is to examine how the *Android Auto* judgment reshapes the legal framework for refusal to supply cases in EU competition law, particularly in relation to the EFD. It also aims to explore how the Court's new approach to platform interoperability under Article 102 TFEU aligns with or overlaps the corresponding obligations introduced by the DMA. Two central research questions guide this thesis:

1. To what extent does the *Android Auto* judgment depart from the EFD as established in *Bronner*, and what new legal principles does it introduce?

2. How does the duty to interoperate under the *Android Auto* judgment relate to the interoperability obligations in the DMA?

## 1.3 Delimitations

This thesis focuses on the legal implications of the *Android Auto* judgment in the context of EU competition law and its interaction with the DMA. It does not seek to explore the broader objectives or theoretical foundations of EU competition policy. Instead, it assumes that the primary purpose of EU competition law is to safeguard the competitive structure of the internal market and instead focus specifically on the aims of the relevant provisions of the thesis.

Other EU regulatory frameworks beyond the DMA, particularly the Data Act and its interoperability obligations for data processing service providers, are excluded from this analysis. Although the Data Act could provide an interesting comparison, it is excluded due to this thesis's specific focus and the fact that it will only apply from 12 September 2025.[14] Enforcement and procedural aspects of the DMA also fall outside the scope of this thesis. Whilst the obligations set out in the DMA, particularly those relating to interoperability, are discussed, the analysis remains limited to the content and rationale of those provisions rather than their practical implementation by the Commission as the regulatory authority.

In terms of substantive focus, this thesis is concerned exclusively with abuses of vertical foreclosure in the form of refusals to supply. The concept of interoperability is primarily examined in its vertical dimension. Horizontal interoperability is mentioned only to the extent necessary to illustrate the broader regulatory ambitions of the DMA. Furthermore, although the principle of *ne bis in idem* and its relevance to parallel enforcement under Article 102 TFEU and the DMA is acknowledged, a detailed description or legal analysis of this principle falls beyond the scope of this thesis.

[14] European Commission, 'Data Act' (*European Commission*) <https://digital-strategy.ec.europa.eu/en/policies/data-act> accessed 15 May 2025.

With regard to case studies, the analysis is limited primarily to *Android Auto*, as well as *Bronner* and *Magill*, where the EFD was first established and developed. Due to the specific purpose of this thesis and constraints of scope and length, other cases are not examined in detail. This includes the *Microsoft* case which, despite also concerning interoperability, arose in a different legal and technological context and does not offer additional perspectives that would meaningfully extend the analysis or contribute to answering the research questions of this thesis.

## 1.4 Methodology and Materials

To answer the research questions of this thesis, a legal dogmatic method is employed. This method involves the systematic examination and interpretation of the law as it stands, *lex lata*, based on generally accepted sources of law. Accordingly, chapters two, three and four are grounded in the recognised legal source hierarchy, focusing primarily on legislation, case law, preparatory works and legal doctrine. Within this framework, the thesis primarily considers EU primary law, secondary law and case law, supplemented by academic books and articles. Primary law comprises the Treaties, including Article 102 TFEU, which is of particular importance for this thesis, as well as the Charter of Fundamental Rights of the European Union (CFR).[15] Secondary law encompasses binding legal acts adopted on the basis of the Treaties, such as regulations, directives and decisions.[16] In the context of research question 2, the DMA is of particular relevance as a regulation constituting secondary law.

The legal dogmatic method is complemented by the EU legal method. This methodology governs the application and interpretation of EU law at the national level, reflecting the CJEU's interpretative authority.[17] Given the CJEU's central role in developing EU law, its judgments are legally binding and form an essential component of the analysis in this thesis.[18]

The legal analysis in chapter 5 uses the legal dogmatic method to critically examine[19] existing law by considering scholarly interpretations and ongoing legal developments, aiming also to identify perspectives *de lege ferenda*, suggestions for future legislative or doctrinal reform.[20] Given the recent development of the *Android Auto* judgment, the analysis integrates perspectives

[15] Article 6(1) of the Consolidated Version of the Treaty on European Union (2012) OJ C326/13 (TEU).
[16] Jörgen Hettne and Ida Otken Eriksson, *EU-rättslig metod - Teori och genomslag i svensk rättstillämpning*. (Norstedts Juridik AB 2011), p. 42.
[17] Jane Reichel, 'EU-rättslig metod' in: Maria Nääv and Mauro Zamboni (eds), *Juridisk metodlära* (2nd edn, Studentlitteratur 2018), p. 109.
[18] Article 288 TFEU.
[19] Jan Kleineman, 'Rättsdogmatisk metod' in: Maria Nääv and Mauro Zamboni (eds), *Juridisk metodlära* (2nd edn, Studentlitteratur 2018) p. 33.
[20] Nils Jareborg, Rättsdogmatik som vetenskap (Svensk juristtidning, 2004) p. 4; Kleineman (2018) pp. 33-40.

from academic scholars actively engaged in this specific field of EU competition law. The contributions of Giuseppe Colangelo,[21] Konstantinos Stylianou,[22] Giorgio Monti[23] and Pablo Ibáñez Colomo[24] are specifically used for the sake of the analysis, as each has discussed the EFD and its evolution, even before *Android Auto*. Their works offer valuable insights for interpreting the ruling and evaluating its doctrinal and practical implications.

While this thesis primarily relies on doctrinal literature and journals, it also includes two blog articles by Ibáñez Colomo. Although blogs are generally excluded from academic writing, an exception is made here due to the context. These blog posts are part of a series, the first of which was published as an op-ed on EU Law Live. Given the critical and analytical nature of chapter 5 and the insights provided by these sources, they are used to enrich the analysis.

Together, these methodological choices aim to ensure that the thesis is grounded in a thorough legal framework while remaining responsive to evolving scholarly discourse and recent jurisprudential developments in this rapidly developing area of EU law.

## 1.5 Outline

The thesis is structured to follow a clear and logical path, starting with the legal background and ending in the broader implications of the *Android Auto* judgment for EU competition law and regulation of digital platforms. The first chapter outlines the purpose, scope and methodology of the study, as well as the key questions it seeks to answer. Chapter two introduces the concept of interoperability as a competition concern in digital markets. In the same chapter, the DMA is introduced and it is explained how it addresses the challenges posed by powerful digital platforms, focusing on the obligations on interoperability. Chapter three turns to the traditional competition law framework, examining how refusals to supply have been applied under Article 102 TFEU, particularly through the EFD. The fourth chapter provides a detailed analysis of the *Android Auto* case itself, including the reasoning of the courts at both national and EU level. It explores how the judgment marks a departure from previous case law and introduces a new approach to platform access for

[21] Giuseppe Colangelo, 'The EU Essential Facilities Doctrine after Android Auto: A Wild Card without Limiting Principles?' (2025) SSRN <https://ssrn.com/abstract=5176785> accessed 1 May 2025.

[22] Konstantinos Stylianou, 'Platform Competition After Android Auto' (2025) SSRN <https://ssrn.com/abstract=5171789> accessed 14 May 2025.

[23] Giorgio Monti, 'The Android Auto Judgment: Every Road Leads Back to Magill' (30 March 2025) SSRN <https://ssrn.com/abstract=5198665> accessed 14 May 2025.

[24] Pablo Ibáñez Colomo, 'Case C-233/23, Android Auto (I): How the Case Was Transformed before the Court of Justice' (26 February 2025) EU Law Live. <https://eu-lawlive.com.ludwig.lub.lu.se/op-ed-case-c-233-23-android-auto-i-how-the-case-was-transformed-before-the-court-of-justice/> accessed 17 May 2025.

open digital platforms. Chapter five is an analytical discussion chapter, reflecting on the broader impact of the ruling and considering how it may reshape legal doctrine and interact with the DMA laid out in the previous chapters. It also looks at the emerging overlap between regulation and antitrust enforcement. Finally, chapter six concludes the thesis by summarising the main findings and offering some thoughts on what this development means for the future of digital competition law in the EU.

# 2 Interoperability Through Regulatory Intervention

## 2.1 Digital Platform Power and Interoperability as Competition Concerns

Digital platforms, often referred to as online platforms, have become central to the functioning of the digital economy, acting as intermediaries between different but interconnected user groups.[25] These platforms operate in two-sided or multi-sided markets, and function as intermediaries of user-generated content, connecting different sides of the market.[26] Most large platforms utilise the platform business model, facilitating transactions or connections as intermediaries between various customer segments.[27] The largest companies, often referred to as 'GAFAM' (Google (also Alphabet), Apple, Facebook (also Meta), Amazon, Microsoft),[28] exemplify the transformative nature of modern business models. Through vertical integration, they manage essential infrastructure such as operating systems, app stores and browsers while simultaneously competing on those very platforms. This dual role enables them to act as gatekeepers, occupying crucial intermediary positions.[29] As a result, they gain the power to restrict access and impose conditions on businesses that rely on their ecosystems.[30] This dominance poses numerous challenges to competition law and policy. These platforms often act as bottleneck monopolies, controlling essential facilities and creating substantial barriers for potential competitors.[31] Anti-competitive practices can include imposing unfair prices, terms or conditions on customers and distorting downstream markets.[32]

A primary factor driving market power is the accumulation and use of 'big data',[33] which according to the OECD refers to 'the use of large-scale computing power and technologically advanced software in order to collect, process and analyse data characterised by a large volume, velocity, variety and

[25] Daniel Mandrescu, 'Applying (EU) competition law to online platforms: Reflections on the definition of the relevant market(s)' (2018) 41(3) World Competition: Law and Economics Review <https://ssrn.com/abstract=3271624> accessed 30 March 2025, p. 5.
[26] ibid; European Commission, 'Impact Assessment Accompanying the document proposal for a regulation of the European Parliament and of the Council, on a Single Market For Digital Services (Digital Services Act) and amending Directive 2000/31/EC' (Commission Staff Working Paper) SWD(2020) 348 final, pp. 3 and 6.
[27] Stefan Larsson and Jonas Andersson Schwarz, *Developing Platform Economies: A European Policy Landscape* (European Liberal Forum 2018), p. 57.
[28] Whish and Bailey (2024), p. 200.
[29] ibid, p. 1119.
[30] Colangelo and Ribera Martinez (2025), p. 3.
[31] Whish and Bailey (2024), p. 1102.
[32] ibid, p. 1120.
[33] ibid.

value'.[34] Whilst these capabilities can enhance services and foster innovation, they raise significant competition concerns. Dominant platforms enjoy considerable advantages from their data assets, making it challenging for competitors to compete on equal terms.[35] GAFAM companies hold vast amounts of consumer and business data, which they can process at remarkable speeds.[36] These advantages are reinforced by strong network effects.[37] The more users a service attracts, the more data it collects, which in turn improves the service and makes it more attractive to new users.[38]

Given this context, it is not surprising that interoperability has become a significant topic in competition law. Interoperability refers to the capability of different products or services to work together seamlessly, allowing for shared functionalities across providers. Interoperability can serve as a powerful tool to enhance competition both within and between platforms.[39] By reducing switching costs and enabling users to engage with multiple services simultaneously, interoperability increases market contestability and facilitates market entry for new competitors seeking access to related or complementary markets.[40] For these reasons, interoperability has become a central focus in proposals for digital market reforms aimed at addressing the dominance of large platforms.[41] In well-functioning digital markets, systems should interact smoothly, enabling interoperability amongst competing services.[42] Unfortunately, this is often not the case. Business users often encounter significant obstacles when trying to access or transfer data across digital platforms. Data generated from interactions with both private and business users is often locked in, making it very difficult to achieve portability and integration with competing services.[43] Already a decade ago, the Commission

[34] OECD, 'OECD Handbook on Competition Policy in the Digital Age' (2022) <ttps://doi.org/10.1787/c8c1841b-en> accessed 20 May 2025.
[35] Recital 2 DMA.
[36] Whish and Bailey (2024), p. 898.
[37] Recital 2 DMA.
[38] Jan Krämer and Daniel Schnurr, 'Big Data and Digital Markets Contestability: Theory of Harm and Data Access Remedies' (2022) 18(2) Journal of Competition Law & Economics 255 <https://doi.org/10.1093/joclec/nhab015> accessed 5 May 2025, pp. 255 and 259.
[39] Marc Bourreau, Jan Krämer and Miriam Buiten, 'Interoperability in Digital Markets' (Centre on Regulation in Europe 2022) <https://cerre.eu/wp-content/uploads/2022/03/220321_CERRE_Report_Interoperability-in-Digital-Markets_FINAL.pdf> accessed 18 March 2025, p. 10; Colangelo and Ribera Martinez (2025), p. 3.
[40] Colangelo and Ribera Martinez (2025), p. 3; Scott Morton et al, (2023).
[41] OECD, 'Data Portability, Interoperability and Digital Platform Competition' (2021) <https://doi.org/10.1787/73a083a9-en.m> accessed 30 March 2025; Crémer, de Montjoye and Schweitzer (2019); Scott Morton et al, (2023).
[42] Colangelo and Ribera Martinez (2025), p. 2.
[43] Björn Lundqvist, 'An access and transfer right to data - from a competition law perspective' (June 2023) 11 Journal of Antitrust Enforcement i57, <https://doi.org/10.1093/jaenfo/jnac017> accessed 14 March 2025, p. i58 f.

recognised that the lack of interoperability between devices and services created a digital bottleneck, risking market fragmentation and hindering innovation.[44]

## 2.2 Limits of Traditional Competition Law in Digital Markets

The failure to ensure interoperability and the resulting systemic lock-in effects highlight a significant structural limitation in the relationship between EU competition law and digital markets. Whilst Article 102 TFEU prohibits abuse of dominance, its *ex post* enforcement model is inherently slow and reactive.[45] *Ex post* obligations require enforcers to intervene only after anti-competitive conduct has materialised, focusing on investigation, deterrence and corrective measures to restore fairness in the market.[46] Each case requires detailed factual investigation and often takes years to resolve. For instance, the *Google Shopping* case[47] lasted over seven years before it was concluded.

These limitations have underscored the shortcomings of traditional antitrust tools in effectively addressing platform power.[48] As enforcement authorities have struggled to keep pace with technological developments, the demand for reform has grown stronger.[49] In response, regulators and courts have taken more proactive measures in recent years, sometimes stretching the boundaries of legal doctrine to address enforcement gaps. The *Google Shopping* case is a clear example. In the absence of established precedent or a conventional theory of harm, the Commission and the Court constructed the concept of 'self-preferencing' as a new form of abuse under Article 102 TFEU.[50] This

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[44] Bourreau, Krämer and Bulten, (2022), p. 10.

[45] Recital 5 DMA; Annegret Engel, Xavier Groussot and Gunnar Thor Petursson, *New Directions in Digitalisation: Perspectives from EU Competition Law and the Charter of Fundamental Rights* (vol 13, Springer 2025), p. 1 and 3.

[46] Oles Andriychuk, 'EU Digital Competition Law: Starting from Scratch' in Annegret Engel, Xavier Groussot and Gunnar Thor Petursson (eds), *New Directions in Digitalisation: Perspectives from EU Competition Law and the Charter of Fundamental Rights* (vol 13, Springer 2025), p. 49.

[47] *Google Search (Shopping)* (Case AT.39740) Commission decision (2017); Case T-612/17 *Google and Alphabet v Commission (Google Shopping)* EU:T:2021:763; Case C-48/22 P *Google and Alphabet v Commission (Google Shopping)* EU:C:2024:726.

[48] Friso Bostoen, 'Understanding the Digital Markets Act' (2023) 68(2) Antitrust Bulletin 26 3< https://ssrn.com/abstract=4440819> accessed 29 March 2025, p. 9 ff; Helene Andersson, 'The Power to Carry Out Dawn Raids Under the Digital Markets Act: Nothing More Than a Scarecrow' in Annegret Engel, Xavier Groussot and Gunnar Thor Petursson (eds), *New Directions in Digitalisation: Perspectives from EU Competition Law and the Charter of Fundamental Rights* (vol 13, Springer 2025), p. 76.

[49] Colangelo and Ribera Martinez (2025).

[50] *Google Search (Shopping)* (Case AT.39740) Commission decision (2017); Case T-612/*17 Google Shopping*; Case C-48/22 P *Google Shopping*.

regulatory creativity was partly driven by the absence of legislative tools specifically designed for digital markets, a gap that the DMA was designed to fill.

## 2.3 The Digital Markets Act

The DMA represents a fundamental shift in the EU's approach to regulating digital markets. Adopted alongside the Digital Services Act (DSA)[51] as part of the EU's Digital Services Package[52], these two acts constitute the core elements of the EU's digital policy framework. Whilst the DSA addresses societal and informational risks through content moderation and platform liability,[53] the DMA focuses on preventing economic concentration by powerful digital platforms to ensure contestability and fairness in the digital economy.[54]

### 2.3.1 Objective and Legal Basis

The primary objective of the DMA is to ensure that digital markets remain fair and competitive in the presence of powerful digital platforms. Gatekeepers, defined as platforms with entrenched market power and systemic importance, are therefore subject to stricter responsibilities.[55] By customising these obligations to reflect their influence and scale, the DMA strengthens a legal framework based on fairness and contestability.[56] As clarified in Recitals 32 and 33, contestability concerns the ability of rivals to compete on merit, whilst fairness targets the structural imbalance between gatekeepers and their dependent users.[57] The goal of the Act is to promote an open and competitive digital environment that encourages innovation, high-quality digital products and services, fair prices and a wide range of user choices.[58] The DMA is designed to complement traditional EU competition law, particularly the enforcement of Articles 101 and 102 of the TFEU.[59]

Unlike Article 102 TFEU, which requires proof of dominance and abusive conduct, the DMA introduces a regulatory regime that operates *ex ante* based

[51] Regulation (EU) 2022/2065 of the European Parliament and of the Council of 19 October 2022 on a Single Market for Digital Services and amending Directive 2000/31/EC (2022) OJ L277/1 (Digital Services Act).
[52] Regulation (EU) 2019/1150 of the European Parliament and of the Council of 20 June 2019 on promoting fairness and transparency for business users of online intermediation services (2019) OJ L186/57. (DSA and DMA were from the beginning part of the same legislative package).
[53] Article 1(1) DSA and Recital 9 DSA.
[54] Recitals 10 and 7 DMA.
[55] Article 3 DMA.
[56] Article 1 and Recital 7 DMA.
[57] Recitals 32 and 33 DMA.
[58] Recital 107 DMA.
[59] Recitals 10 and 11 DMA.

on certain prohibitions.[60] This regime aims to prevent market failures before any legal violations occur, in contrast to *ex post* enforcement that addresses issues after they happen. The DMA specifically targets structural problems caused by dominant players in the market, allowing regulators to take a more proactive and interventionist approach.[61] Once a platform is designated as a gatekeeper, certain obligations apply automatically, eliminating the need for case-by-case findings of abuse.[62] This allows the DMA to pre-empt harmful practices and bypass the complex and time-consuming evidentiary thresholds that have hindered traditional competition enforcement.[63] In doing so, it establishes a' public-utilities-like neutrality regime' for gatekeepers.[64] By imposing obligations such as interoperability and access to core functionalities, the DMA seeks to remedy structural market deficiencies that competition law alone could not address. Traditional antitrust tools, including the EFD, were never designed to impose such systemic openness or to transform business models at their core.[65]

The legal basis for the DMA is Article 114 TFEU, which empowers the EU to adopt harmonisation measures for the functioning of the internal market.[66] The DMA emerged not in isolation but against the backdrop of mounting legislative and regulatory efforts across jurisdictions.[67] A primary objective of the EU regulation is to create consistent obligations throughout the EU and prevent fragmentation due to differing national rules.[68] Consequently, Article 1(5) of the DMA explicitly prohibits Member States from enacting specific obligations for gatekeepers to promote fairness or contestability.[69] Although the DMA introduces a new regulatory framework, it is designed to operate in parallel with existing regulations. It does not replace enforcement under Articles 101 and 102 TFEU but rather complements it[70], so that conduct that may not qualify as abusive under the Treaty may still fall within the scope of the DMA.

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[60] Annegret Engel, ‘Gatekeepers under EU Scrutiny: Curtailing the Freedom to Con-duct a Business in Digitalisation?’ (2025) Transnational Legal Theory 157 <https://doi.org/10.1080/20414005.2025.2482340> accessed 2 April 2025, p. 160.
[61] Andriyhcuk (2025), p. 49.
[62] Recital 5 DMA.
[63] Engel (2025), p. 160; Andriychuk (2025), p. 50.
[64] Marco Cappai and Giuseppe Colangelo, ‘Taming digital gatekeepers: the ‘more regulatory approach’ to antitrust law’ (2021) 41 Computer Law & Security Review <http://dx.doi.org/10.1016/j.clsr.2021.105559> Accessed 29 March 2025, p. 2; Colangelo and Ribera Martinez (2025), p. 10.
[65] Colangelo and Ribera Martinez (2025), p. 10.
[66] Mikka Hiltunen, ‘Social Media Platforms within Internal Market Construction: Patterns of Reproduction in EU Platform Law’ (2022) 23(9) German Law Journal 1226 <https://ssrn.com/abstract=4285737> accessed 4 May 2025, p. 1228.
[67] Whish and Bailey (2024), p. 1119.
[68] Recital 8 DMA.
[69] Article 1(5) DMA.
[70] Recitals 10 and 11 DMA.

### 2.3.2 Balancing Contestability with Fundamental Rights and Investment Incentives

The DMA imposes *ex ante* obligations on gatekeepers, ranging from interoperability requirements to restrictions on self-preferencing. However, these obligations must be reconciled with fundamental rights, particularly the freedom to conduct a business and the right to property protected under Articles 16 and 17 of the CFR.[71]

The rights enshrined in the CFR constitute an integral part of EU law.[72] However, the CJEU has consistently held that economic freedoms are not absolute. The ruling in *Wachauf*[73] established that such rights may be lawfully restricted if justified by overriding public interests, provided that the essence of the right is respected and the measure is proportionate. More specifically, Article 52(1) of the CFR permits restrictions on fundamental rights where they are: (i) provided for by law, which the DMA satisfies;[74] (ii) pursue legitimate objectives, such as market fairness; (iii) respect the essence of the right; and (iv) are proportionate, meaning necessary and not unduly burdensome.[75] In *Digital Rights Ireland*[76] and *Ligue des droits humains*[77], the CJEU further interpreted the proportionality requirement as necessitating clear and precise rules regarding the scope of restrictions and minimum safeguards to protect rights.[78]

The DMA aims to balance constraints on business freedoms with the need to restructure market conditions to create fairness and openness in digital markets.[79] At the outset, the DMA appears to fulfil the conditions required by Article 52(1) and subsequent case law through clearly defined thresholds,[80] targeted obligations and recitals that seek to respect the essence of the rights.[81] However, scholars like Annegret Engel underscore that gatekeepers' rights under Article 16 receive very little attention in the DMA.[82] Nevertheless, due to their scale and systemic role, gatekeepers are presumed able to absorb these

[71] Articles 16 and 17 of the Charter of Fundamental Rights (2012) OJ C326/391 (CFR).
[72] Article 51(1) CFR; Article 6 TEU.
[73] Case C-5/88, *Hubert Wachauf v Bundesamt für Ernährung und Forstwirtschaft (Wachauf*), EU:C:1989:321, para 18.
[74] Inês Neves, 'A Reading of the Digital Markets Act in the Light of Fundamental Rights' in Annegret Engel, Xavier Groussot and Gunnar Thor Petursson (eds), *New Directions in Digitalisation: Perspectives from EU Competition Law and the Charter of Fundamental Rights* (vol 13, Springer 2025), p. 156.
[75] Article 52(1) CFR; Case C-426/11 Alemo-Herron and others.,EU:C:2013:521, paras 33 and 36; Neves, (2025), p. 155.
[76] Joined Cases C-293/12 and C-594/12, *Digital Rights Ireland and Seitlinger and Others.* EU:C:2014:238.
[77] Case C-817/19, *Ligue des droits humains v Conseil des ministres.* EU:C:2022:491.
[78] ibid, para 54; See further Joined Cases C-203/15 and C-698/15, *Tele2 Sverige AB v. Post-och telestyrelsen and Others*. EU:C:2016:970.
[79] Article 1; Recital 6 and 7 DMA.
[80] See e.g. Article 3 DMA.
[81] See Recitals 109 and 8 DMA.
[82] Engel (2025), p. 171.

burdens. Unless they demonstrate measurable harm, further minimal safeguards are unlikely.[83] Engel and Petursson highlight that proportionality requires careful and structured analysis when multiple rights interact. Courts may need to refine this balance through jurisprudence or implementing instruments.[84] Ultimately, whilst the DMA constrains certain economic freedoms, it aims to do so within the limits of the Charter. Any tension between regulation and rights will depend on how obligations are implemented, not just how they are framed in law.[85]

Beyond the fundamental rights guaranteed to companies, there is also a need to strike a balance between regulating markets and safeguarding incentives for innovation and investment.[86] Innovation can drive economic growth,[87] but it can equally reinforce monopolistic practices.[88] There is a global concern that innovation may be stifled if substantial market power is allowed to suppress competition, particularly since enforcement typically lags behind market developments.[89] Striking the right balance between contestability and investment incentives in dynamic digital industries where platforms operate as gatekeepers is a global challenge for policymakers and regulators.[90] This tension between promoting competition and preserving innovation incentives has been repeatedly addressed by the CJEU, as will be evident later in this thesis. The DMA represents a legislative attempt to recalibrate this balance through *ex ante* regulation, which Kokott and Serafimova contend can serve as a solution to these structural challenges.[91]

### 2.3.3 Gatekeeper Designation

A platform is designated as a gatekeeper under the DMA if it satisfies three cumulative criteria based on the qualitative and quantitative thresholds provided for in Articles 3(1) and (2) in the Act. First, the company must have a

[83] Engel (2025), p. 171.
[84] Gunnar Thor Petursson, 'A New Framework for Limitations of Fundamental Rights in EU Law?' in Annegret Engel, Xavier Groussot and Gunnar Thor Petursson (eds), *New Directions in Digitalisation: Perspectives from EU Competition Law and the Charter of Fundamental Rights* (vol 13, Springer 2025) p. 245 ff; Engel (2025), p. 170 f.
[85] Neves (2025), p. 159.
[86] Juliane Kokott and Mariya Serafimova, 'Balancing Innovation and Competition in Dynamic Industries' (2025) 3 Wirtschaft und Wettbewerb 123 <https://research.owlit.de/document/b05c2a62-7129-3b2d-98c8-99d178ddf17d> accessed 2 May 2025.
[87] OECD, 'The Innovation Imperative: Contributing to Productivity, Growth and Well-Being' (2015) <http://dx.doi.org/10.1787/9789264239814-en> accessed 4 May 2025.
[88] Carl Shapiro 'Competition and Innovation: Did Arrow Hit the Bull's Eye' in: Josh Lerner and Scott Stern, T*he Rate and Direction of Inventive Activity Revisited* (University of Chicaco Press 2012), pp. 361 and 400.
[89] Heike Schweitzer and Simon de Ridder, 'How to Fix a Failing Art. 102 TFEU: Substantive Interpretation, Evidentiary Requirements, and the Commission's Future Guidelines on Exclusionary Abuses' (June 2024) Journal of European Competition Law & Practice, Volume 15, Issue 4, pp. 222–243 <https://doi.org/10.1093/jeclap/lpae033> accessed 4 May 2025, pp. 222 and 225.
[90] Kokott and Serafimova (2025).
[91] ibid.

significant impact on the internal market,[92] as presumed if the annual EU turnover is at least 7.5 billion euros or the average market capitalisation is at least 75 billion euros[93]. Second, it must provide a core platform service (CPS)[94] with at least 45 million monthly active end users and 10,000 yearly active business users within the EU.[95] Third, the provider must hold or be expected to hold soon, an entrenched and durable position in its operations.[96]

A core element of the assessment is the identification of CPSs, defined as digital services that exhibit characteristics such as economies of scale, multi-sided intermediation and user dependency.[97] Article 2 of the DMA identifies ten categories as CPSs, including online intermediation services, online search engines, operating systems and web browsers.[98]

When all three cumulative conditions are fulfilled over three consecutive financial years, the platform is presumed to be a gatekeeper, triggering the application of the DMA unless the provider successfully rebuts the designation through a market investigation.[99] Importantly, the Commission is also empowered under Article 3(6) to designate a gatekeeper even if the platform does not meet the quantitative thresholds.[100] This can occur if the platform satisfies the qualitative criteria after a market investigation, as stated in Article 15.[101] Furthermore, gatekeeper status is not permanent. Under Article 4, the Commission may revise, amend or repeal a designation if there is a material change in circumstances or the original decision was based on incomplete or incorrect information.[102] Furthermore, the Commission is required to reassess gatekeeper status every three years and review the emergence of new gatekeepers annually.[103]

Once officially designated under Article 3, the company must comply with a series of obligations and prohibitions set out in Articles 5 to 7, which require implementation within six months.[104] Failure to comply may result in fines of up to 10% of the company's total worldwide turnover or 20% in cases of repeated infringements.[105]

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[92] Article 3(1)(a) DMA.
[93] Article 3(2)(a) DMA.
[94] Article 3(1)(b) DMA.
[95] Article 3(2)(b) DMA.
[96] Article 3(1)(c) DMA.
[97] Recital 2 DMA.
[98] Article 2(2) DMA.
[99] Article 3(5) DMA.
[100] Article 3(6) DMA
[101] Article 15 DMA.
[102] Article 4(1) DMA.
[103] Article 4(2) DMA.
[104] Article 3(10) DMA.
[105] Article 30(1) and 30(2) DMA.

### 2.3.4 Interoperability Obligations

Amongst the obligations specifically tied to gatekeepers is the obligation to ensure interoperability, meaning that third-party services must be able to interact with the gatekeeper's systems or services.[106] The DMA provides for obligations with regard to both horizontal and vertical interoperability. Unlike prior regulatory frameworks such as Article 61(2)(c) of the European Electronic Communications Code,[107] where interoperability obligations depended on the discretion of national regulators, the DMA introduces a direct and automatic obligation for designated gatekeepers. This removes the need for prior assessments or proportionality tests and reflects the DMA's proactive, *ex ante* approach to tackling entrenched market failures more quickly.[108]

A central feature of both interoperability obligations is that access to the gatekeeper's systems must be granted free of charge.[109] This explicit obligation removes financial entry barriers for competitors and prevents gatekeepers from using pricing as a discriminatory tool.[110] It reflects the broader principle of input equivalence, whereby competitors should receive access under the same technical and functional terms that the gatekeeper reserves for its own services.[111]

#### *2.3.4.1 Horizontal Interoperability*

Horizontal interoperability refers to users' ability on one service to communicate seamlessly with users on another service.[112] The DMA addresses this through a specific access obligation for gatekeepers providing number-independent interpersonal communications services, such as messaging applications. Under Article 7(1), designated gatekeepers must provide, upon request and free of charge, interoperability for a defined set of 'basic functionalities' listed in Article 7(2).[113] These include core features such as text messaging and file sharing, with the obligation gradually expanding to include group messaging and voice and video calls.[114] The rationale behind horizontal interoperability is enhancing 'contestability',[115] one of the DMA's key objectives.[116] As Recital 64 explains, dominant messaging platforms benefit from

[106] Article 6(4), 6(7), 7(1) and 7(2) DMA.
[107] Directive 2018/1972 of the European Parliament and of the Council of 11 December 2018 establishing the European Electronic Communications Code (2018) OJ L321/36.
[108] Bourreau (2022), p. 6.
[109] Articles 6(7) and 7(1) DMA.
[110] Bourreau (2022), p. 19.
[111] Recital 55 DMA.
[112] Marc Bourreau, 'DMA Horizontal and Vertical Interoperability Obligations' (Centre on Regulation in Europe 2022) <https://cerre.eu/wp-content/uploads/2022/11/DMA_HorizontalandVerticalInteroperability.pdf> accessed 20 March 2025, p. 5.
[113] Article 7(1) DMA.
[114] Articles 7(2) DMA.
[115] Bourreau (2022), p. 7.
[116] Recital 32 DMA.

strong network effects that weaken contestability.[117] By requiring interoperability for basic functionalities, the DMA seeks to weaken these network advantages and allow competition to occur on the basis of service quality and innovation rather than user scale alone. This regulatory intervention also helps to level the competitive playing field between smaller and larger players.[118] The DMA requires only partial interoperability, focusing on standard functionalities and excluding non-standard functionalities.[119] This reflects a deliberate trade-off between enforcement feasibility and the complexity and cost of implementation. Broader interoperability could improve competition further but might overburden gatekeepers and hinder innovation by making implementation overly complex and costly.[120]

### *2.3.4.2 Vertical Interoperability*

Vertical interoperability, as introduced by the DMA, addresses the functional integration between different layers of the digital value chain, particularly between operating systems and the services or hardware that depend on them. This type of interoperability is crucial for ensuring that downstream market participants, such as app developers and hardware manufacturers, can effectively compete with gatekeepers controlling essential digital infrastructure.[121] The DMA enshrines vertical interoperability obligations in Articles 6(4) and 6(7), thereby creating legal duties for gatekeepers to open their systems to third-party services. Article 6(4) mandates that gatekeepers enable sideloading, allowing the installation and effective use of third-party software applications or app stores without requiring use of the gatekeeper's own app store.[122] In practice, this reduces user lock-in and enhances third parties' ability to utilise alternative distribution channels.[123] More technically complex is Article 6(7), which obliges gatekeepers to provide interoperability with, and access to, the same hardware and software features that the gatekeeper's own services utilise.[124] The scope of this obligation is clarified in Recital 55, which restricts the right of access to 'competing service or hardware providers' who require such access 'to be able to provide a competitive offering to end users'.[125]

[117] Recital 64 DMA.
[118] Bourreau (2022), p. 7.
[119] ibid, p. 9.
[120] ibid; Competition and Markets Authority, 'Online Platforms and Digital Advertising: Market Study Final Report' (2020) <https://assets.publishing.service.gov.uk/media/5fa557668fa8f5788db46efc/Final_report_Digital_ALT_TEXT.pdf> accessed 21 May 2025.
[121] Bourreau (2022), p. 14 f.
[122] Article 6(4) DMA.
[123] Recital 50 DMA.
[124] Article 6(7) DMA.
[125] Recital 55 DMA

### 2.3.4.3 *Objective Justifications*

Unlike Article 102 TFEU, the DMA does not include provisions for objective justification or efficiency defences. Recital 23 of the DMA explicitly rejects the consideration of efficiencies in the gatekeeper designation process,[126] underscoring the prescriptive nature of the regulatory regime. Article 10 provides only a narrowly defined exemption, limited to matters of public health or public security.[127] However, regarding interoperability, the DMA recognises that whilst such obligations are necessary for contestability and fairness, they may raise legitimate concerns for gatekeepers about the integrity and security of their systems. Therefore, the DMA explicitly allows gatekeepers to invoke objective justifications for limiting interoperability in narrowly defined circumstances. Article 6(4) permits gatekeepers to take measures that are 'strictly necessary and proportionate' to ensure that third-party software applications or app stores do not compromise the integrity of the hardware or operating system. Such measures must be duly justified by the gatekeeper and cannot exceed what is necessary to achieve their protective purpose. [128]Article 6(7) contains a similar provision governing access to essential hardware and software features. The gatekeeper is not prevented from taking strictly necessary and proportionate measures to ensure that interoperability 'does not compromise the integrity of the operating system, virtual assistant, hardware or software features', provided such measures are duly justified.[129]

The justification requirement encompasses both substantive and procedural elements. The gatekeeper must demonstrate not only that the risk exists, but also that the chosen measures represent the least restrictive means to safeguard integrity. Recital 50 of the DMA confirms this, providing that such measures must be 'demonstrated by the gatekeeper' as necessary and proportionate and that 'there are no less-restrictive means' available. Additionally, such measures must not rely on default settings or pre-installations, which are deemed inappropriate restrictions on user choice under the same recital.[130] This legal architecture underscores a balancing act in the DMA, ensuring third-party access and interoperability whilst preserving the gatekeeper's right to maintain the functionality and security of its platform. In practice, this means the gatekeeper can rely on an objective justification defence only if it meets the high threshold of strict necessity and proportionality, demonstrating the absence of less restrictive alternatives, coupled with a substantiated evidence-based rationale.[131]

[126] Bourreau (2022), p. 17; Recital 55 DMA.
[127] Article 10 DMA.
[128] Article 6(4) DMA.
[129] Article 6(7) DMA.
[130] Recital 50 DMA.
[131] ibid; Bourreau (2022), p. 18.

# 3 Abusive Refusals under Article 102 TFEU

## 3.1 Article 102 TFEU as a Tool for Safeguarding Competition

The aim of Articles 101 and 102 TFEU is to maintain effective competition[132], reflecting the broader purpose of EU competition law to safeguard the competitive structure of the internal market.[133] Article 102 TFEU prohibits the abuse of a dominant position within the internal market where such abuse may affect trade between Member States. To establish a breach, it is not sufficient to show that an undertaking holds a dominant position. There must also be evidence of abusive conduct rather than solely 'competition on the merits'. This differentiates Article 102 from Article 101 TFEU, which prohibits anti-competitive agreements regardless of market dominance.[134]

Abuses under Article 102 are typically divided into two categories: exploitative and exclusionary. Exploitative abuses include, for example, unfair pricing or unfair conditions, whilst exclusionary abuses are those that aim to hinder or eliminate competitors from the market.[135] To constitute an exclusionary abuse, the conduct must first be capable of producing exclusionary effects and, secondly, not fall within the concept of 'competition on the merits'.[136]

Although Article 102 provides a non-exhaustive list of abusive practices[137], its interpretation must remain flexible to accommodate changing market conditions, such as those occurring in dynamic and complex digital environments. This evolving interpretation was exemplified in the *Google Shopping* case, where the European Commission and later the CJEU identified 'self-preferencing', Google favouring its own comparison shopping service in its search results, as a new form of abuse not previously covered by established categories.[138] This reflects the broader shift from a form-based to an effects-

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[132] Case 6/72 *Europemballage and Continental Can v Commission,* EU:C:1973:22, para 25.

[133] Whish and Bailey (2024), p. 207; This has been stated in several cases and arises from the logic in Protocol 27 TEU and Article 3(1)(b) TFEU. See e.g Case 6/72 *Europemballage and Continental Can v Commission,* EU:C:1973:22, para 47; Case C-680/20 *Unilever Italia Mkt Operations Srl,* EU:C:2023:33, para 36; Case C-333/21 *European Superleague Company, SL v Fédération internationale de football association (FIFA) and Union of European Football Associations (UEFA),* EU:C:2023:1011.

[134] Whish and Bailey (2024), p. 183.

[135] Whish and Bailey (2024), p. 218.

[136] Case C-377/20*, Servizio Elettrico Nazionale and Others v Autorità Garante della Concorrenza e del Mercato*, EU:C:2022:379, para 103.

[137] Case 6/72 *Europemballage and Continental Can v Commission,* EU:C:1973:22, para 26; C-95/04 P, *British Airways v Commission,* EU:C:2007:166, para 57; Case C-280/08 P *Deutsche Telekom AG v. European Commission*, EU:C:2010:603, para 173.

[138] Case C-48/22 P *Google Shopping*.

based assessment of exclusionary abuses adopted by the Union courts.[139] Conduct once presumed abusive by its form must now be assessed on the basis of its actual or potential competitive effects.[140]

## 3.2 Refusal to Supply as an 'Exceptional' Exclusionary Abuse

One of the recognised forms of exclusionary abuses set out in the list in Article 102 is 'refusal to supply'. This practice may prevent competitors from accessing essential inputs or infrastructure, thereby harming the downstream market and leading to vertical foreclosure.[141] At its core, it concerns whether a dominant undertaking's decision to withhold access to key inputs from a new entrant constitutes a breach of competition law.[142] Refusals to supply can take two forms: unconditional and conditional. An unconditional refusal involves a complete denial of supply under any circumstances. In contrast, a conditional refusal occurs when the dominant undertaking withholds supply unless the purchaser accepts specific terms, such as agreeing to exclusivity arrangements or other restrictive conditions.[143]

Abuse under Article 102 TFEU also includes so-called 'constructive' refusals to supply and is therefore not confined to outright denials. A constructive refusal arises when a dominant undertaking nominally agrees to supply but imposes conditions so unreasonable that effective access is denied. This can occur through unfair terms, excessive pricing or strategic delays that are disproportionate and serve no legitimate purpose in the agreements. Such behaviour, while formally appearing as cooperation, effectively restricts the purchaser's ability to compete and thus falls within the scope of exclusionary abuse.[144]

The *Commercial Solvents* case[145] was the first to establish that a refusal to supply could infringe Article 102, involving a dominant firm's refusal to supply a downstream competitor in order to favour its own entry into that market.

[139] European Commission, 'Amendments to the Guidance on the Commission's enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings' (Communication) C (2023) OJ C 116/1, para 7; Linsey McCallum, Inge Bernaerts, Massimiliano Kadar, Johannes Holzwarth, David Kovo, Marie Lagrue, Edouard Leduc, Luca Manigrassi, Jorge Marcos Ramos, Isabel Pereira Alves, Vera Pozzato and PinelopiStamou, *A Dynamic and Workable Effects-based Approach to Abuse of Dominance, Competition Policy Brief* (European Commission, Directorate-General for Competition 2023) ISBN 978-92-68-01420-2.
[140] Alison Jones, Brenda Sufrin and Niamh Dunne, *Jones & Sufrin's EU Competition Law* (8th edn, OUP 2023), p. 408.
[141] Whish and Bailey (2024), p. 783.
[142] Jones, Sufrin and Dunne (2023), p. 508.
[143] OECD, 'Data Portability, Interoperability and Digital Platform Competition' (2021).
[144] European Commission, 'Guidance on the Commission's enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings', (Communication) C (2009) OJ C 45/7, para 79.
[145] Cases 6 and 7/73, *Istituto Chemioterapico Italiano SpA and Commercial Solvents Corp v Commission (Commercial Solvents)*, EU:C:1974:18.

The Court found abuse because *Commercial Solvents* used its dominance in the raw materials market to affect competition downstream, refused to supply an existing customer in order to compete with it, and risked eliminating that customer from the downstream market.[146] This early ruling opened the door for recognising the EFD in EU law to assess when a refusal to supply amounts to an abuse of dominance, which will be discussed further in section 3.3.

Refusal to supply remains one of the most complex and debated forms of abuse under Article 102 TFEU.[147] In principle, a refusal to supply by a dominant undertaking should not be considered an abuse of dominance, as such conduct reflects the freedom to conduct a business[148] and the right to property[149] enshrined in the CFR. This principle was confirmed by the CJEU in *Volvo v Veng*[150], which reaffirmed the general principle that undertakings are free to choose their trading partners.[151] This is further reflected in the Commission's Guidance paper, stating that any undertaking, dominant or not, should have 'the right to choose its trading partners and to dispose freely of its property'.[152] The concept of a duty to supply is, in principle, equivalent to mandating interoperability, as reflected in the DMA.[153] Such requirements limit fundamental rights and are prohibited unless they are justified as provided for by law, pursue legitimate objectives, respect the essence of the right and are proportionate.[154]

Given the interaction with the freedom to conduct a business and the protection of property rights, refusal to supply is categorised as an 'exceptional' form of abuse.[155] Consequently, the threshold for imposing a duty to supply is high, requiring careful balancing of any interference with these fundamental rights.[156] To be proportionate and justified, such limitations should only be applied where no less restrictive means are available to address the abuse of dominance.[157] The rationale for imposing a duty to supply only in cases where no alternative remedy exists has been consistently affirmed in AG Opinions

[146] Joined Cases 6 and 7/73 *Commercial Solvents*, para 25.
[147] Whish and Bailey (2024), p. 781.
[148] Article 16 CFR.
[149] Article 17 CFR.
[150] Case C-238/87 *Volvo v Veng*, EU:C:1988:477.
[151] ibid, paras 8 and 9.
[152] European Commission, 'Guidance on the Commission's enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings', (Communication) C (2009) OJ C 45/7, para 75.
[153] See section 2.3.
[154] Article 52(1) CFR; See further section 2.3.2.
[155] Jones, Sufrin and Dunne (2023), p. 508.
[156] Crémer, de Montjoye and Schweitzer (2019), p. 99; Case C-7/97 *Bronner*, Opinion of AG Jacobs paras 56 and 57.
[157] Case T-24/90 *Automec Srl v Commission* EU:T:1992:97 para 51.

and CJEU jurisprudence, with AG Jacobs's opinion in *Bronner*[158] still being one of the most cited.[159]

AG Jacobs stated that the balancing act must consider that interference with these economic rights might undermine an undertaking's incentive to invest, as it could enhance competition in the short term while potentially reducing it in the long term.[160] This reasoning was reaffirmed by the Court in *Slovak Telekom*[161], which emphasised that dominant undertakings may be discouraged from investing in efficient products or facilities if they are obliged, solely at competitors' request, to share the benefits of their investments.[162] A key concern in this regard is the risk of free-riding, where a competitor benefits from another undertaking's investment or innovation without bearing the associated costs.[163] Free-riding undermines the rationale for continued investment and is acknowledged as a relevant factor in the Commission's Guidance Paper.[164]

Conversely, AG Jacobs emphasised in his *Bronner* opinion that, in certain cases, a refusal to grant access could result in the elimination or substantial reduction of competition, with effects on consumers in both the short and long term.[165] Reflecting this concern, the Commission has observed that such refusals may harm consumers when they prevent competitors from introducing innovative or improved products, particularly where there is clear consumer demand or potential for technical development.[166]

Against this background, AG Medina most recently held in her opinion in the *Android Auto* case that refusal cases[167] require a delicate balance between 'the interest of competitors and consumers in the proper development of the neighbouring market and fertile competition therein' and 'the respect of the freedom of contract and the right to property of the dominant undertaking as a way of promoting sufficient incentives for carrying out its activities in an efficient manner'.[168] While the high threshold for imposing a duty to supply

[158] Case C-7/97 *Bronner*, Opinion of AG Jacobs.
[159] ibid, paras 56-58; Later referred to in Case C-165/19 P, *Slovak Telekom v. Commission (Slovak Telekom)*, EU:C:2021:239, Opinion of AG Saugmandsgaard Øe, paras 70-77 and Case C-233/23 *Android Auto*, Opinion of AG Medina, para 29.
[160] Case C-7/97 *Bronner*, Opinion of AG Jacobs, paras 57 and 62.
[161] Case C-165/19 P, *Slovak Telekom.*
[162] ibid, para 47.
[163] Whish and Bailey (2024), p. 782.
[164] European Commission, 'Guidance on the Commission's enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings', (Communication) C (2009) OJ C 45/7, para 75.
[165] Case C-7/97 *Bronner*, Opinion of AG Jacobs, para 61.
[166] European Commission, 'Guidance on the Commission's enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings', (Communication) C (2009) OJ C 45/7, para 87.
[167] In this case: 'the refusal to grant access'.
[168] Case C-233/23 *Android Auto*, Opinion of AG Medina, paras 30-32; Case C-48/22 P *Google Shopping*, para 217.

relies on balancing short-term and long-term competition, an excessively high threshold can actually produce the opposite effect. In a recent contribution, AG Juliane Kokott and Mariya Serafimova argued that the indispensability criterion, as will be further developed in section 3.3.1, might constitute too high a bar for intervention in dynamic industries.[169]

## 3.3 The Essential Facilities Doctrine

Although *Commercial Solvents* marked the starting point for assessing refusal to supply under Article 102, the EFD and the CJEU's rulings in *Magill* and *Oscar Bronner* provided a more structured framework for determining when access can be mandated.[170] The EFD emerged in EU competition law as a framework for assessing whether a refusal to deal or to supply a critical input by a dominant undertaking constitutes an abuse of dominance under Article 102 TFEU. The doctrine aims to refine the balancing act outlined in sections 2.3.2 and 3.2 by limiting intervention to cases where a facility or input is essential to market competition.[171] Although the CJEU has never explicitly referred to the doctrine as the EFD but rather as 'refusal to deal' or 'refusal to supply'[172], these concepts will be used interchangeably in the thesis.

The origins of the doctrine trace back to U.S. antitrust law, specifically the 1912 *United States v. Terminal Railroad Association* case, where the Supreme Court ruled that denying access to key rail infrastructure unjustifiably restricted market entry.[173] Although the doctrine took a different form in Europe, the underlying concern remains the same: when a dominant undertaking controls infrastructure or inputs indispensable for downstream competition, refusal to provide access can lead to market foreclosure.[174] The Commission began implicitly applying EFD principles in the early 1990s in the *Ports of Holyhead and Rødby* cases.[175]

### 3.3.1 The 'Exceptional Circumstances' Approach

It was in 1995, with the *Magill*[176] judgment, that the EFD was first clearly articulated. In *Magill*, TV operators allowed third-party undertakings to use the programming listings in question. As noted by the Commission, RTE,

[169] Kokott and Serafimova (2025).
[170] Jones, Sufrin and Dunne (2023), p. 513.
[171] Case C-7/97 *Bronner*, Opinion of AG Jacobs, paras 64 and 65.
[172] Jones, Sufrin and Dunne (2023), p. 512; Inge Graef, 'Rethinking the Essential Facilities Doctrine for the EU Digital Economy' (2019) 53(1) Revue juridique Thémis de l'Université de Montréal 33 <https://ssl.editionsthemis.com/uploaded/revue/article/30047_03-Graef.indd.pdf> accessed 4 May 2025.
[173] United States v Terminal Railroad Association of St. Louis, 224 US 383 (1912).
[174] Jones, Sufrin and Dunne (2023), p. 511.
[175] *Port of Rødby v. Denmark* (94/119/EC) Commission Decision (1994) OJ L55/5; *Sea Containers/Stena Sealink* (Case IV/34.689) Commission Decision 94/19/EC (1994) OJ L15/8; *Sealink/B&I Holyhead* (Case IV/34.174) Commission Decision (1992).
[176] Joined Cases C-241/91 P and 242/91 P *Radio Telefis Eireann (RTE) and Independent Television Publications Ltd (ITP) v. Commission (Magill)*, EU:C:1995:98.

BBC and ITV had not reserved the input solely for their own use. When the investigation began, they had already licensed their intellectual property to daily newspapers free of charge.[177] What they retained for the needs of their 'own business' was a particular application of the input, namely the publication of weekly listings. The Court found it irrelevant that the TV operators had already licensed the listings in the unrelated market of daily listings. What mattered was whether the dominant undertaking had kept the weekly listings, for which access was requested, for their own business needs.[178] Therefore, 'indispensability' was introduced as an element to be considered in the established test for determining in which 'exceptional circumstances' refusal to grant access could be considered abusive. The 'exceptional circumstances' approach consists of the following four criteria:

(i) the access request concerns a product or service indispensable to the exercise of an economic activity on a neighbouring market;

(ii) the refusal is likely to eliminate all competition in that market;

(iii) the refusal is not capable of being objectively justified; and

(iv) the refusal must prevent the emergence of a new product for which there is potential consumer demand. [179]

Even though *Magill* was the first landmark case for the doctrine, it is the *Bronner* case[180] that is the most cited when applying the EFD in decisions of the CJEU and opinions of AGs.[181] The case stemmed from a small Austrian newspaper seeking access to a nationwide home-delivery scheme operated by Mediaprint, a dominant publisher with nearly half the market share. Mediaprint refused, prompting the newspaper to claim abuse of dominance under Article 102, arguing that alternative distribution methods were less viable. The CJEU, drawing on its earlier *Magill* judgment, applied a strict 'exceptional circumstances' test and restated the first three conditions of the *Magill* test as decisive for a refusal to supply to be abusive.[182]

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[177] *Magill TV Guide/ITP, BBC and RTE* (Case IV/31.85) Commission Decision 89/205/EEC (1989) OJ L78/43.
[178] Joined Cases C-241/91 P and 242/91 P *Magill*; Pablo Ibáñez Colomo, 'Case C-233/23, Android Auto (II): How the Judgment Departs from Magill/IMS Health (and Bronner)' (*Chillin'Competition*, 12 March 2025) <https://chillingcompetition.com/2025/03/12/case-c-233-23-android-auto-ii-how-the-judgment-departs-from-magill-ims-health-and-bronner/>accessed 17 May 2025.
[179] Case C-7/97 *Bronner* paras 40 and 41; Joined Cases C-241/91 P and 242/91 P *Magill*.
[180] Case C-7/97 *Bronner*.
[181] Case C-7/97 *Bronner*, Opinion of AG Jacobs, paras 56-58. Case C-233/23 *Android Auto*, Opinion of AG Medina , paras 30-32; Case C-165/19 P, *Slovak Telekom*, Opinion of AG Saugmandsgaard Øe, paras 70-77.
[182] Case C-7/97 *Bronner*, paras 39-41; More recently confirmed in Case T-612/17 *Google Shopping*, para 213 and Case C-233/23 *Android Auto*, Opinion of AG Medina, para 28.

The test is structured to balance public and private interests while reducing risks like discouraging innovation or enabling free riding. However, the indispensability requirement, combined with the requirement to eliminate all competition in the downstream market, has made successful enforcement under Article 102 TFEU in refusal to deal cases rare. Therefore, *Bronner* is viewed as a high-water mark in the EFD jurisprudence due to its exceptionally stringent standard for finding abuse. Expanding its reach too broadly, some argue, could undermine the European Commission's ability to address exclusionary conduct effectively.[183]

The indispensability requirement has emerged as the most central criterion in the application of the EFD within EU competition law.[184] The criterion functions as a crucial threshold that limits intervention to cases where a facility or input is truly essential to market competition, rather than merely convenient for competitors.[185] *Bronner* established a high bar for two principal reasons. First, compelling firms to deal interferes with their property rights and freedom of contract. Second, such interference may undermine incentives to invest and innovate, and the indispensability requirement helps protect dynamic competition, which is considered more beneficial in the long term.[186] As AG Jacobs noted in *Magill*, it is crucial to distinguish between cases where a dominant undertaking gains a competitive advantage downstream and those where it holds 'a genuine stranglehold on the related market'[187], thereby justifying the stringent indispensability criterion as necessary to protect contractual and property rights. The CJEU emphasised in *Bronner* that assessing whether a product or service is indispensable for a company to operate in a given market requires examining the availability of alternative options, even if they are less advantageous.[188] The Court also stressed the need to consider whether technical, legal or economic barriers exist that would render the creation of such alternatives impossible or excessively difficult, even through cooperation with other firms.[189]

Regarding the likelihood of eliminating all competition on a secondary market, the second condition, the Court confirmed in *IMS Health* that a refusal

[183] Case C-165/19 P, *Slovak Telekom*, Opinion of AG Saugmandsgaard Øe, para 64.
[184] See Niamh Dunne, 'Dispensing with Indispensability' (March 2020) 16(1) Journal of Competition Law & Economics 74 <https://doi.org/10.1093/joclec/nhaa004> accessed 18 March 2025, describing indispensability as the lynchpin of refusal to deal; See further Colangelo (2025).
[185] Case C-7/97 *Bronner*, Opinion of AG Jacobs, paras 64 and 65.
[186] Pablo Ibáñez Colomo (2025), 'Case C-233/23, Android Auto (II): How the Judgment Departs from Magill/IMS Health (and Bronner)'; See further section 2.3.2 and 3.2.
[187] Case C-7/97 *Bronner*, Opinion of AG Jacobs, paras 64 and 65.
[188] Case C-7/97 *Bronner*, paras 43-46.
[189] ibid.

may amount to abuse even where the upstream input is not marketed separately, as long as it is necessary for a specific downstream activity.[190] It suffices that the authority identifies the relevant market, which may even be a potential or hypothetical market.[191]

A prima facie abuse may, in principle, be exempt from Article 102 if the defendant can prove an 'objective justification', indicating the third criteria. In *Bronner*, the CJEU unusually highlighted the absence of such a justification when setting out the 'exceptional circumstances' required to find a refusal to supply abusive.[192] This reflects the underlying presumption in *Bronner* that such refusals are generally lawful, either because the dominant undertaking has a right to withhold its property or may have a legitimate reason to do so. However, the Commission and courts have been largely dismissive of objective justification defences, rarely presenting a significant obstacle to finding abuse in practice.[193]

For a refusal to supply case regarding intellectual property to not be abusive, it must not prevent the emergence of a new product with potential consumer demand[194], thus creating a fourth condition. The rationale behind the new product criterion was reaffirmed by the CJEU in *IMS Health*[195] where the Court emphasized the need to strike a balance between protecting intellectual property rights and preserving competition. This balance tilts in favour of competition 'where refusal to grant a licence prevents the development of the secondary market to the detriment of consumers.[196]' Importantly, a refusal may be considered abusive only where the requesting party aims to introduce something genuinely new, rather than merely replicate the right holder's existing goods or services.[197] This balancing act between interests was later challenged by the General Court (GC) in *Microsoft*, a case concerning the refusal to share interoperability information protected by copyright.[198] By extending the *Magill* and *IMS* principles, the court broadened the 'new product' criterion to include obstacles to follow-on innovation.[199]

[190] Case C-418/01 *IMS Health GmbH & Co. OHG v. NDC Health GmbH & Co. KG (IMS Health*), EU:C:2004:257 paras 39-45.
[191] Case C-418/01 *IMS Health*, para 44.
[192] Case C-7/97 *Bronner*, para 41.
[193]Jones, Sufrin and Dunne (2023), p. 529.
[194] Joined Cases C-241/91 P and 242/91 P *Magill*, para 54.
[195] Case C-418/*01 IMS Health*, para 44.
[196] ibid, para 48.
[197] Case C-418/*01 IMS Health*, para 49.
[198] Case T-201/04, *Microsoft v. Commission*, EU:T:2007:289
[199] ibid, para 647.

### 3.3.2 Moving Beyond *Bronner*: Four Categories of Abusive Refusals under the Doctrine

The criteria established in *Magill* and *Bronner* have since been clarified and, at times, adjusted through subsequent case law. More recent case law from the CJEU has even signalled a narrowing of the *Bronner* framework, suggesting that the strict conditions laid out in that judgment were tailored to the particular facts of the case.[200]

In *TeliaSonera*[201], the CJEU made clear that *Bronner* does not apply when a dominant firm has already granted access but imposes unfair or discriminatory terms.[202] The Court reaffirmed this in *Slovak Telekom* explaining that when access exists, either voluntarily or due to regulatory obligation, the conduct does not amount to a true refusal, and *Bronner*'s indispensability test is not required.[203] Furthermore, when access is mandated by regulation, as in *Slovak Telekom*[204], or where the infrastructure is state-funded, as in *Lithuanian Railways*[205], the indispensability condition is again waived. These exceptions are grounded in the presumption that public authorities have already balanced the interests typically weighed under the EFD.[206] Moreover, *Lithuanian Railways* introduced a further exception clarifying that the *Bronner* logic does not extend to situations where the dominant undertaking destroys infrastructure to block access, a strategy incompatible with the rationale behind refusal to supply rules.[207]

*Slovak Telekom* also confirmed that *Bronner* does not govern all forms of access-related abuses.[208] Derivations from *Bronner'*s indispensability criteria in the 2010s emerged mainly in the context of margin squeeze, an abuse on its own under EU competition law.[209] In its 2009 Enforcement Guidance, the Commission likened margin squeeze to a constructive refusal to deal, arguing that a dominant undertaking may effectively exclude competitors by setting wholesale and retail prices at levels that make profitable operation impossible

[200] Case C-48/22 P *Google Shopping*, para 90; Case C-42/21 P, *Lietuvos geležinkeliai AB v. European Commission (Lithuanian Railways)*, EU:C:2023:12, para 80; Case C-165/19 P, *Slovak Telekom*, para 45; Case C-48/22 P *Google Shopping*, Opinion of AG Kokott, para 83; Case C-233/23 *Android Auto*, AG Medina, para 33.
[201] Case C-52/09 *Konkurrensverket v. TeliaSonera Sverige AB*, EU:C:2011:83.
[202] ibid, paras 55-56.
[203] Case C-165/19 P, *Slovak Telekom,*, para 53.
[204] ibid, para 57.
[205] Case C-42/21 P, *Lithuanian Railways*, paras 86-87.
[206] Colangelo (2025), p. 11.
[207] Case C-42/21 P, *Lithuanian Railways*, paras 81-83.
[208] Case C-165/19 P, *Slovak Telekom*, para 53.
[209] ibid, para 50; Case C-295/12 P *Telefónica SA and Telefónica de España SAU v. European Commission*, EU:C:2014:2062, paras 75 and 96; Case C-52/09 *Konkurrensverket v. TeliaSonera Sverige AB*, EU:C:2011:83, paras 55-58; Case C-280/08 P *Deutsche Telekom AG v. European Commission*, EU:C:2010:603.

for even an equally efficient rival.[210] Similarly, in *Google Shopping*, the Court rejected the application of *Bronner* on the basis that the case involved discriminatory self-preferencing within a service, not denial of access to a separate infrastructure, thereby creating a new form of abuse.[211]

In assessing whether a refusal to supply a customer in a downstream market constitutes an abuse of a dominant position, the case law appears to revolve around the consideration of five key issues:

(i) Is there a refusal to supply?

(ii) Does the accused undertaking have a dominant position in an upstream market?

(iii) Is the product to which access is sought indispensable to someone wishing to compete in the downstream market?

(iv) Would a refusal to grant access lead to the elimination of effective competition in the downstream market?

(v) Is there an objective justification for the refusal to supply?[212]

Based on these considerations and the deliberations made in this section, the EU courts seem to have identified four main categories of potentially abusive refusals through case law.[213]

First, a refusal may be abusive when a dominant company discontinues a prior commercial relationship with a downstream rival, particularly when the company intends to enter that downstream market itself. This was first recognised in *Commercial Solvents*, where the Court held that ceasing supply to a dependent customer could constitute abuse. [214]

The second and perhaps most well-known category is based on the *Bronner* judgment, which applies to outright refusals to deal from the outset. This legal test sets a high bar, requiring proof that access to the input is indispensable, that the refusal would exclude effective competition and that no objective justification is available.[215]

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[210] European Commission, 'Guidance on the Commission's enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings', (Communication) C (2009) OJ C 45/7, para 75.
[211] Case C-48/22 P *Google Shopping*, para 113.
[212] Whish and Bailey (2024), p. 784.
[213] Monti (2025), p. 1.
[214] Joined Cases 6 and 7/73 *Commercial Solvents*, para 25.
[215] Case C-7/97 *Bronner*, para 41.

A third set of cases diverges from the *Bronner* model and includes instances where access obligations stem from regulation, public investment or the dominant firm's past practice of providing access. In these cases, the focus shifts from the act of refusal itself to the manner and effects of denying access, whether through obstruction, delay or degradation of service. The third category applies to cases where the company has (i) been subject to a regulatory obligation to provide access[216] (ii) controlled infrastructure developed with state subsidies[217] or (iii) already granted access to rivals[218]. Here, the abuse lies not in the refusal itself but in how access is managed, such as through discriminatory terms, unjustified delays or technical obstruction.

A fourth category applies where the refusal concerns the licensing of intellectual property rights. In such cases, the *Bronner* criteria apply in full, and the company requesting access must additionally demonstrate that it seeks to introduce a new product or service not offered by the rights holder. This standard was introduced in *Magill*[219] and later confirmed in *Microsoft*[220].

[216] Case C-165/19 P, *Slovak Telekom*, paras 50 and 51.
[217] Case C-42/21 P, *Lithuanian Railways*, para 87.
[218] Case C-48/22 P *Google Shopping*, paras 97-113.
[219] Joined Cases C-241/91 P and 242/91 P *Magill*.
[220] Case T-201/04, *Microsoft v. Commission*, EU:T:2007:289.

# 4 The *Android Auto* Case: Interoperability Through Antitrust Enforcement

## 4.1 Background of the Case

On 25 February 2025, the Grand Chamber of the Court delivered its judgment in *Alphabet Inc., Google LLC and Google Italy Srl v Autorità Garante della Concorrenza e del Mercato (Android Auto)*[221], marking an important moment in the evolving case law on refusal to supply, with clarifications on the duty to ensure interoperability on digital markets. It also marks an end to the EFD, at least to how we know it from *Bronner* and *Magill*.

The dispute originated from an investigation by the Italian Competition Authority (Autorità Garante della Concorrenza e del Mercato, AGCM), which found that Google had abused its dominant position by refusing to integrate Enel X Italia's application JuicePass into Android Auto. [222]

Android Auto, launched by Google in 2015, is a platform interface built on the Android OS that enables smartphone applications to operate on in-vehicle displays for functions such as navigation, communication, and media.[223] Google requires developers to adapt their applications using predefined templates for specific categories of apps. At the relevant time, however, these templates were limited to messaging and media applications.[224]

Enel X Italia, part of the Enel Group, operates of more than 60% of electric vehicle recharging stations in Italy.[225] Its JuicePass app, launched in 2018, provides services related to electric vehicle charging, including locating stations, reserving time slots and managing payment, all of which compete to some extent with Google Maps.[226] JuicePass was created for devices running the Android operating system and could be accessed through the Google Play Store, and was thus launched and offered to end consumers through platforms other than Android Auto.[227]

In September 2018, Enel requested that Google take the technical steps necessary to make JuicePass interoperable with Android Auto. Granting access would have required Google to develop a new interoperability interface for this category of applications. Google rejected the request, explaining that the

[221] Case C-233/23 *Android Auto.*
[222] Autorità Garante della Concorrenza e del Mercato *Alphabet Inc, Google LLC and Google Italy Srl (Google/Enel)*, 27 April 2021, Decision A529.
[223] Decision A529, *Google/Enel*, paras 285 and 286.
[224] Case C-233/23 *Android Auto*, para 7.
[225] ibid, paras 9 and 10.
[226] Decision A529, *Google/Enel*, para 24; Colangelo and Ribera Martinez (2025), p. 5.
[227] Case C-233/23 *Android Auto*, para 9.

platform at that time only supported messaging and media apps, and later citing security concerns and resource allocation priorities. [228]

## 4.2 AGCM’s Reasoning and the Referred Questions

In 2019, Enel filed a complaint with the AGCM, which concluded in 2021 that Google’s refusal constituted an abuse of dominance. The AGCM emphasised that Android Auto was essential for developers of driver-related apps and accused Google of limiting competition by favouring its own navigation service, Google Maps, without legitimate justification. The authority imposed a fine exceeding €102 million and ordered Google to grant access.[229]

The AGCM began by articulating the theory of harm, arguing that Google's refusal to extend Android Auto's interoperability undermined a level playing field both statically, by preventing Enel from matching Google Maps' features, and dynamically, by limiting innovation in Enel’s app.[230] The AGCM then continued its analysis based on the doctrine established in *Magill* and *IMS Health*, requiring indispensability, elimination of competition, prevention of a new product, and absence of objective justification for the conduct to constitute abuse.[231]

Regarding indispensability, the AGCM acknowledged that, technically, an app could be installed directly on a car’s infotainment system. However, since these apps were also available via app stores, developing separate versions for each system would impose high transaction costs. Since Android Auto was accessible in 98% of cars sold in Italy, it was considered the market standard.[232] The AGCM therefore concluded that Android Auto was indispensable for app developers targeting users outside the iOS ecosystem.[233] Concerning the second criterion of elimination of competition, the authority noted that excluding the JuicePass app allowed Google to develop rival products, and that continued exclusion would enable network effects to entrench its position, thereby making late entry by competitors less viable.[234]

[228] Decision A529, *Google/Enel*, paras 163, 165 and 190; Case C-233/23 *Android Auto*, Opinion of AG Medina, paras 8-10.
[229] Decision A529, *Google/Enel*.
[230] ibid, para 375.
[231] ibid, para 382; See further Pablo Ibáñez Colomo, ‘Case C-233/23, Android Auto (I): How the Case Was Transformed before the Court of Justice’ (26 February 2025) EU Law Live <https://eulawlive-com.ludwig.lub.lu.se/op-ed-case-c-233-23-android-auto-i-how-the-case-was-transformed-before-the-court-of-justice/> accessed 17 May 2025; Monti (2025), p. 2.
[232] Decision A529, *Google/Enel*, para 295.
[233] ibid, paras 382 and 410.
[234] ibid, para 383.

Regarding the prevention of a new product criterion, the AGCM found that consumers were denied features offered by JuicePass, such as booking charging stations.[235] The authority also noted that the exclusion harmed the structure of the downstream market by reducing innovation and removing Enel as a competitive alternative.[236] Additionally, the AGCM warned that the exclusion could hinder the development of charging infrastructure by limiting Enel's access to valuable data, thereby affecting not only the app market but also the rollout of charging points.[237] This, in turn, could slow the adoption of electric vehicles and negatively impact environmental goals.[238] Concerning objective justification, the AGCM found growing demand for charging apps and noted Google's own development efforts, thereby making the commercial rationale for refusal less convincing.[239] It also rejected security concerns, seeing no greater risk than with existing apps or Google Maps features.[240]

Due to the new type of legal questions raised, the Consiglio di Stato (Italian Council of State) referred the case to the CJEU for a preliminary ruling with a set of five preliminary questions.[241] The questions focus on the scope of Article 102 TFEU in the context of digital platform access and the legal boundaries of enforcing interoperability under competition law.

The first referred question concerned whether indispensability is limited to 'indispensability' or if it means convenience instead. More specifically, if the indispensability requirement in refusal to supply cases could be met if access is necessary not for the product's existence, but for enhancing its ease of use or convenience, particularly when the product being withheld serves primarily to simplify access to other third-party goods or services.[242]

The second question asked whether abuse could still be established in the absence of actual foreclosure, that is, when the excluded undertaking remains active on the relevant market. This was based on the fact that Enel's app, even though not accessible via Android Auto, had been offered to end users.[243]

The third and fourth questions addressed the issue of objective justification. The fourth question regards whether a dominant undertaking may be required to create an interoperability template for specific categories of applications, even in cases where no such template currently exists. Further clarification is

[235] Decision A529, *Google/Enel*, para 387.
[236] ibid, para 390.
[237] ibid, para 413.
[238] ibid, para 389.
[239] Decision A529, *Google/Enel*, paras 396-398.
[240] ibid, para 402.
[241] Consiglio di Stato *Alphabet et al. v. Autorita` Garante della Concorrenza e del Mercato*, 7 April 2023, No. 3584.
[242] Case C-233/23 *Android Auto*, para 24.
[243] ibid.

sought on whether competition authorities are required to evaluate the time and resources a dominant undertaking would need to create or adapt the infrastructure needed for interoperability. The third question sought to determine whether a dominant undertaking could justify its refusal to deal, especially if the absence of a pre-existing solution, with regards to the fourth question, could serve as an objective justification.[244]

Finally, the fifth question addressed the degree of market analysis required to trigger the obligation to adapt or innovate. The national court sought clarification on whether it was necessary to precisely define a downstream market to assess potential exclusionary effects, or whether identifying the general market affected would suffice.[245]

## 4.3 Opinion of AG Medina

When the case reached the Advocate General, AG Medina largely agreed with the conclusions reached by the AGCM, though she reframed the legal questions posed by the Italian Council of State.[246] Rather than directly engaging with whether the indispensability criterion should be interpreted more flexibly in light of the digital context, she addressed whether the *Bronner* doctrine was applicable at all in this particular case.[247] The AG thereby not only applied a different, though similar, doctrine than the AGCM, but also changed the legal test for analysing the abusive conduct.[248]

AG Medina argued that the conditions established in *Bronner* do not apply when the digital infrastructure in question is intentionally designed to be used by external developers. In her view, the *Bronner* doctrine is relevant only in scenarios where a dominant undertaking develops infrastructure solely for its own internal purposes and keeps it closed to third-party use.[249]Android Auto, by contrast, was built from the outset to be complemented by third-party applications. Therefore, according to AG Medina, platforms that actively invite developer participation cannot be treated under the same legal lens as proprietary infrastructure developed for exclusive use. She emphasised that such platforms are structurally and functionally distinct from the kind of infrastructure contemplated in *Bronner*, and thus applying that framework would be inappropriate.[250] AG Medina also proposed in her opinion that a refusal to grant access should be justifiable where granting access would conflict with the platform's economic model or purpose.[251]

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[244] Case C-233/23 *Android Auto*, para 24.
[245] ibid.
[246] Case C-233/23 *Android Auto*, Opinion of AG Medina.
[247] ibid, para 26.
[248] Ibáñez Colomo, 'Case C-233/23, Android Auto (I): How the Case Was Transformed before the Court of Justice' (2025).
[249] Case C-233/23 *Android Auto*, Opinion of AG Medina, paras 34-40.
[250] Colangelo and Ribera Martinez (2025), p. 6.
[251] Case C-233/23 *Android Auto*, Opinion of AG Medina, para 80.

## 4.4 Judgment of the CJEU

On appeal from Google, Italy's Council of State sought clarification from the CJEU regarding the applicability of Article 102 TFEU in digital contexts. The Grand Chamber of the Court sided with AG Medina's position, reformulated the referred questions, and examined whether the *Bronner* doctrine applied to the specific case. [252] The ruling resulted in a narrowing of the *Bronner* framework in line with previous case law. While the AGCM relied on the fourth category of abusive refusals laid down in section 3.3.2 and requiring a new product or service, the CJEU instead turned to explore the scope of the second and third categories, elaborating on *Bronner*.[253] This section will address the CJEU's response to each of the referred questions.

### 4.4.1 Scope of Indispensability in Platform Access

In addressing the first preliminary question, the Court reformulated it to consider whether Article 102 TFEU could apply to a refusal to deal in a case involving access to a digital platform through interoperability, even where the platform is not indispensable but can make the product more attractive to consumers.[254]

According to the Court, the *Bronner* criteria were only applicable in the specific circumstances of that case, involving a complete refusal to deal where the dominant firm's infrastructure was created solely for its own use and kept closed to external parties.[255] In Android Auto, the infrastructure was not developed solely for Google's own business 'but with a view to enabling third-party undertakings to use that infrastructure…'[256] Based on the fact that the platform infrastructure was designed to host and support third-party services, the Court found that compelling access does not disrupt the dominant firm's economic model developed for the infrastructure, and thus the strict *Bronner* test no longer applies in such circumstances.[257]

The Court went further, stating that the absence of indispensability does not automatically preclude a finding of abuse. It ruled that a refusal to provide access to a platform by a third-party undertaking that has developed an app can constitute an abuse of a dominant position 'even though that digital platform is not indispensable for the commercial operation of the app concerned on a downstream market'.[258] This represents a significant departure from previous interpretations of Article 102, effectively lowering the threshold for intervention. The judgment unequivocally confirmed that the strict indispensability criterion developed in the landmark *Bronner* judgment is inapplicable

[252] Case C-233/23 *Android Auto*, para 33.
[253] Monti (2025), p. 2.
[254] Case C-233/23 *Android Auto*, para 36.
[255] ibid, paras 39-42.
[256] ibid, para 44.
[257] ibid, paras 44-46.
[258] ibid, para 50.

to certain categories of digital platforms, particularly those with an open or quasi-open structure.

In summary, the Court ruled that access to a digital platform designed to enable third-party undertakings does not need to be 'indispensable' in order for a refusal to deal to constitute an abuse under Article 102 TFEU.[259] A refusal to ensure interoperability may therefore constitute abuse even absent indispensability.

### 4.4.2 Threshold for Exclusionary Effects

The Court's responses to the second and fifth preliminary questions further illustrate a loosening of the analytical standards traditionally expected of competition authorities in abuse of dominance cases. The Court affirmed that authorities do not need to prove that exclusionary conduct has actually driven rivals out of the market. It is sufficient to demonstrate that the conduct was capable of doing so.[260] This position reiterates earlier case law and reinforces the principle that the abuse lies in the attempt to foreclose, not necessarily in the success of that attempt.[261] The Court reiterated that 'whether the conduct at issue is abusive cannot depend on the ability of competitors on the market concerned to mitigate such effects'.[262] According to the Court, competition authorities are only required to provide 'tangible evidence' that the conduct is capable of producing exclusionary effects, and the assessment cannot be grounded in a 'mere hypothesis'. Thus, the 'existence of doubt' about the capability of the practice to create actual or potential effects must benefit the undertaking.[263] At the same time, the fact that rivals remain on the market and continue to attract users might still serve as a relevant indicator in assessing whether the dominant firm's conduct did, in reality, have the potential to restrict competition.[264]

Regarding the fifth question, the Court held that competition authorities are not required to precisely define the downstream market on which the exclusionary effects occur.[265] It suffices that the authority identifies the relevant market, which may even be potential or hypothetical, as affirmed in *IMS Health*.[266] This has particular relevance for markets still in the process of emerging or undergoing rapid evolution. In such contexts, the structure and contours of the downstream market may not yet be stable or fully formed, making precise definition potentially counterproductive.[267] As such, both the 'capability' standard for establishing the elimination of competition and the

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[259] Case C-233/23 *Android Auto*, para 52.
[260] ibid, para 61.
[261] Case C-377/20 *Servizio Elettrico Nazionale and Others* EU:C:2022:379, para 53.
[262] Case C-233/23 *Android Auto*, para 58.
[263] ibid, para 57.
[264] ibid, para 61.
[265] ibid, para 86.
[266] C-418/01 *IMS Health*, para 44.
[267] Case C-233/23 *Android Auto*, para 85.

softened market definition assessment ease the burden of proof for competition authorities.

### 4.4.3 Duty to Develop New Interoperability Templates

In responding to the fourth preliminary question, the Court recognised that a dominant undertaking may be required to proactively create an interoperability template, even where no such mechanism currently exists. Building on the logic that Android Auto was not developed solely for Google's own business, the dominant undertaking may be under a duty to ensure technical compatibility, such as by creating a template to support third-party app integration.[268] If no template exists during the access request, this alone is not a sufficient ground for denial. Technical or resource-related difficulties in providing such access do not, by themselves, amount to valid objective justifications.[269] Thus, the obligation is not confined to granting access to existing interfaces but may extend to requiring the dominant undertaking to develop new interoperability templates tailored to the category of applications requesting access.[270]

To mitigate this burden, the Court stated that a reasonable period of time necessary to develop an interoperability tool must be considered and, in some cases, a delay may be objectively justified.[271] In making such assessments, competition authorities must carefully balance the platform’s technical and financial burdens against the legitimate access needs of the third-party applicant. Factors relevant to this assessment include: (i) the technical complexity of creating the template needed for the relevant category of applications; (ii) whether the dominant company faces internal limitations, such as the inability to quickly secure the necessary resources, especially qualified personnel, to meet the requesting party's specific needs; and (iii) whether external factors, like regulatory obligations or legal constraints, affect the firm’s capacity to develop the required template.[272]

Moreover, the Court acknowledged that creating an interoperability template may entail costs and effort. In such circumstances, the dominant undertaking is permitted to request a financial contribution from the third party seeking access, provided such compensation is fair and proportionate in relation to the development costs.[273]

### 4.4.4 Objective Justifications and the Burden of Proof

The third preliminary question gave the Court an opportunity to elaborate on both the substantive and procedural dimensions of objective justifications for

[268] Case C-233/23 *Android Auto*, paras 73 and 74.
[269] Colangelo and Ribera Martinez (2025), p. 6.
[270] Case C-233/23 *Android Auto*, para 74.
[271] ibid.
[272] ibid, para 75.
[273] ibid, para 76.

a prima facie refusal to deal. On the substantive side, the Court recognised that a dominant undertaking's refusal to ensure interoperability may be objectively justified in certain circumstances. Such justification could stem from concerns regarding the integrity or security of the platform or where creating a template for interoperability would be technically impossible.[274] In doing so, the Court decided on a stricter standard than the one proposed by AG Medina, which had also contemplated conflicts with a platform's economic model or purpose as potential justifications.[275]

Procedurally, the burden of proof initially rests with the competition authority, which must establish prima facie abusive conduct under Article 102 TFEU. Once the dominant undertaking puts forward an objective justification supported by credible arguments and evidence, the burden shifts back to the authority.[276] At this point, the competition authority must assess whether the justification is objectively necessary and proportionate in light of all the relevant evidence and the reasons cited by the dominant undertaking for denying or delaying access.[277]

[274] Case C-233/23 *Android Auto*, para 81.
[275] Case C-233/23 *Android Auto*, opinion of AG Medina. para 80.
[276] ibid, para 79.
[277] ibid, para 80

# 5 Discussion

## 5.1 Antitrust Enforcement Post *Android Auto*

What was previously considered beyond the reach of Article 102 TFEU and led to the adoption of the DMA[278] has now, through the *Android Auto* judgment, proven to fall within the scope of antitrust enforcement. This judicial shift is somehow sensible when viewed through the lens of digital platform economics. Open digital platforms, such as those surrounding Google and Android Auto, are often characterised by strong network effects and constitute an architecture that invites third-party innovation and participation.[279] In such environments, the undertaking at the core of the ecosystem, typically the platform operator, enjoys a structurally enhanced position of dominance, as it effectively controls access to a crucial layer of the digital value chain.[280] As the Court noted in *TeliaSonera*, the greater the degree of dominance, the more significant the potential anti-competitive effects of exclusionary conduct become.[281] This intensifies the 'special responsibility' of dominant undertakings to refrain from conduct, such as unjustified refusals to deal, that may impair competition not on the merits but through control over access.

By holding the *Bronner* test inapplicable to such cases, the Court reaffirmed its commitment to an effects-based approach to Article 102 TFEU. In the context of open or semi-open platforms, the indispensability requirement risks shielding exclusionary conduct from scrutiny, even when that conduct may produce harmful effects on competition. In *Android Auto*, the Court therefore lowered the procedural barrier for enforcement, allowing authorities to assess conduct on the basis of its potential to foreclose competition, without being constrained by the strict conditions of *Bronner*. The Court emphasised that the test for assessing whether the dominant undertaking had the ability to restrict competition on the merits, must rely on tangible evidence, not mere hypotheses, and that any doubt about anti-competitive effects should benefit the undertaking.[282] Thus, effects-based analysis plays a key role in assessing potentially abusive conduct in the post *Android Auto* landscape. The judgment now serves as the main filter for balancing static and dynamic competition in digital markets.[283]

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[278] See sections 2.2 and 2.3.
[279] Case C-233/23 *Android Auto,* Opinion of AG Medina, paras 36 and 37; See further section 2.1.
[280] Case T-612/17 *Google Shopping* EU:T:2021:763.
[281] Case C-52/09 *Konkurrensverket v. TeliaSonera Sverige AB*, EU:C:2011:83, para 81.
[282] Case C-233/23 *Android Auto*, para 57.
[283] Pablo Ibáñez Colomo, 'Case C-233/23, Android Auto (III): Implications of the Judgment' (*Chillin'Competition*, 28 March 2025) <https://chillingcompetition.com/2025/03/28/case-c-233-23-android-auto-iii-implications-of-the-judgment/> accessed 17 May 2022.

### 5.1.1 The ‘Not-So-Essential’ Facilities Doctrine for Open Digital Platforms

In *Android Auto*, the CJEU introduced a new approach to refusal to deal cases, diverging from the long-standing *Bronner* conditions. This departure stemmed from the Court’s view that the traditional framework, developed under very specific circumstances, was not suited for digital platform environments.[284] Central to this reasoning was the nature of the infrastructure at issue, whether it was built exclusively for internal use or intended for third-party use. Faced with this divergence, the Court had three possible paths: it could have applied the *Bronner* conditions regardless of the factual differences, refined the doctrine to better reflect the dynamics of platform markets or broken from *Bronner* entirely to develop a new framework.[285] The Court ultimately chose the last path. Rather than overruling *Bronner*, the Court distinguished it, arguing that its strict standards should apply only in cases involving infrastructure developed solely for the dominant firm's own business operations.[286] Once the AG and Court moved away from the *Bronner* framework and its rationale of protecting investment incentives, they created a new category of refusal to deal doctrine without any further elaboration.[287]

Stylianou notes that whilst the platform’s openness justified moving away from *Bronner*, the Court’s decision to dilute all existing conditions was excessive.[288] He argues that a more measured alternative would have been to relax only the indispensability requirement, requiring dominant firms to share even non-essential infrastructure, but only where refusal would eliminate competition and no significant development effort was needed to enable access.[289] Even if the Court did not completely disregard the *Bronner* conditions, Colangelo argues that *Android Auto* marks at least the final stage of the EFD as originally conceived.[290] When a platform's design and business model eliminate the need for rivals or authorities to prove indispensability for downstream market access, it becomes nearly impossible for dominant platforms to invoke the EFD's exceptional circumstances in digital contexts. As Colangelo describes it: ‘the EU has officially entered the era of the convenient facilities doctrine’.[291]

[284] See section 4.4.
[285] Stylianou (2025), p. 8.
[286] Case C-233/23 *Android Auto*, paras 39-42.
[287] Ibáñez Colomo (2025), ‘Case C-233/23, Android Auto (II): How the Judgment Departs from Magill/IMS Health (and Bronner)’; Christof Koolen ‘The Refusal to Allow Interoperability Between Android Auto and Third-Party Apps – A Deep Dive into Enel X Italia v Google’ (2022) 53 IIC - International Review of Intellectual Property and Competition Law 758 <https://doi.org/10.1007/s40319-022-01190-x> accessed 18 March 2025.
[288] Stylianou (2025).
[289] Stylianou (2025), p. 12.
[290] Colangelo (2025), p. 21.
[291] ibid.

Traditionally, the first *Bronner* condition requires that the input sought by a third party be 'indispensable' for engaging in economic activity on a neighbouring market. The indispensability criterion sets a high bar, as truly indispensable inputs are rare. In *Android Auto*, however, this threshold was not met. Enel's app functioned perfectly well on the standard Android system and users could still access it while driving.[292] However, the Court found that even where the indispensability criterion is not met, an abuse of dominance can still be established based on the input's 'attractiveness'. The Court held that the refusal to ensure interoperability between a third party-app and a digital platform not exclusively developed for the dominant company can constitute an abuse of dominance where the platform 'is not indispensable for the commercial operation of that app on a downstream market, but is such as to make that app *more attractive to consumers*'.[293] In other words, the standard has shifted from 'indispensability' to 'attractiveness'. However, neither AG Medina nor the Court provided detailed explanation or justification for this shift. The threshold for 'attractiveness' compared to 'indispensability' is substantially lower. Almost any feature can arguably enhance consumer attractiveness, potentially making it easier for third parties to claim entitlement to access on the basis of improved competitiveness.[294]

The second condition established in *Bronner* requires that a refusal to deal be likely to result in the 'elimination of competition' in the neighbouring market.[295] Instead of applying this strict threshold, the Court applied the general abuse of dominance standard. It is no longer necessary to show that competition was eliminated, only that the conduct had the potential to restrict it.[296] To determine the anti-competitive effect of the conduct, the Court ruled that an assessment should be made of whether that conduct 'was such as to *hinder* competition on the market concerned being maintained or to *hinder* its growth, taking into account all the relevant factual circumstances'.[297]

Crucially, the Court held that the existence of abuse does not depend on whether rivals managed to survive the refusal or whether competition in the market ultimately grew.[298] Even if competition is maintained or expands, a refusal to deal may still be unlawful if it obstructs competitive development in any way.[299] By adopting this approach, it can be argued that the Court essentially treats refusal to deal like any other form of exclusionary abuse, without acknowledging its historical status as an 'exceptional' abuse.[300] The Court

[292] Case C-233/23 *Android Auto*, para 48.
[293] Case C-233/23 *Android Auto*, para 52.
[294] Stylianou (2025), p. 9.
[295] See section 3.3.1.
[296] Case C-233/23 *Android Auto*, para 54. See further Case C-377/20 *Servizio Elettrico Nazionale and Others*, EU:C:2022:379, para 53; Case C-48/22 P *Google Shopping*, para 165.
[297] Case C-233/23 *Android Auto*, para 61.
[298] ibid, paras 56 and 57.
[299] ibid, paras 58 and 61.
[300] See section 3.2.

in *Bronner* had justified its strict criteria on the basis that compelling a dominant undertaking to deal with third parties was considered an extraordinary remedy, appropriate only where the harm was equally extraordinary. That reciprocity between remedy and harm is absent in *Android Auto*.[301]

The Court ruled in both *Magill* and *Bronner* that there may be circumstances where a firm can be compelled to deal with rivals. *Android Auto* goes further, suggesting that a company may not only be required to deal with third parties but also to modify the operation of its infrastructure to accommodate them, without the need to show that the infrastructure is indispensable.[302] Google, in this case, was not just required to provide access but also to build the infrastructure, a technical template, necessary to enable that access. The Commission had previously proposed broadening the scope of Article 102 TFEU to oblige firms to invest in adapting their infrastructure to accommodate competitors, particularly in sectors like energy-[303] However, this development poses a significant departure from earlier refusal to deal jurisprudence, where the infrastructure already existed and the dominant firm's refusal centred on withholding it.[304] In *Bronner*, the contested asset was a newspaper distribution network; in *Microsoft*, it was interface specifications; in *IMS Health*, the 'brick structure' of data; and in *Slovak Telekom*, the local loop. In all those cases, the requested input was already available, and no new development was required.

This expansion of Article 102 TFEU effectively imposes not only a far-reaching duty to deal but, in certain cases, a duty to invest for the benefit of third parties. In doing so, the Court's reasoning brings dominant open or semi-open digital platforms closer to the status of public utilities. The DMA was introduced precisely to establish such a public-utility-like neutrality regime through regulation.[305] Yet the Court's approach now raises the question of whether open digital platforms are themselves to be treated as public utilities under competition law and Article 102 TFEU as well.[306]

### 5.1.2 Investment Incentives for Businesses in Digital Markets

At its core, the judgment imposes a principle of openness whereby infrastructure not exclusively internal must be made accessible to third parties if refusal could hinder competition, even where the market remains competitive or has grown.[307] The distinction between infrastructure developed for the own needs

[301] Stylianou (2025), p. 10.
[302] Ibáñez Colomo, 'Case C-233/23, Android Auto (II): How the Judgment Departs from Magill/IMS Health (and Bronner)' (2025).
[303] *ENI* (Case COMP/39.315) Commission Decision (2010).
[304] Stylianou (2025), p. 11.
[305] See section 2.3.
[306] This type of public utilities-like neutrality regime has usually been outside the scope of competition rules, see Colangelo and Ribera Martinez (2025), p. 10.
[307] Stylianou (2025), p. 20.

of the business and infrastructure developed for third-parties carries significant weight, as it directly affects how the incentives of dominant firms to invest in infrastructure and innovation are evaluated within the refusal to deal framework. According to the Court, compelling access to infrastructure built solely for a firm's internal operations could undermine fundamental rights that are closely tied to a company's willingness to invest in the first place.[308] However, the same level of protection is not warranted where the infrastructure in question was developed with external users in mind. In such cases, the Court argued that applying the strict standards of *Bronner* is unnecessary to preserve investment incentives. Instead, it emphasised that where a dominant undertaking incurs the cost of developing infrastructure not exclusively for its own use but also for potential third-party integration, granting access does not substantially disrupt the business model underlying that infrastructure.[309] In other words, the Court ruled that where the platform was conceived with openness in mind, mandatory access does not distort the original commercial logic that justified its creation. This reasoning, however, may be considered to rest on a binary view of platform architecture that may not reflect the complexity of digital ecosystems in practice.

Although the Court rightly acknowledged that investment incentives must be part of the refusal to deal analysis, its reliance on a simplistic business model distinction has raised concerns. Critics argue that the framing of infrastructure as either 'open' and designed for third-party access or 'closed' and intended solely for internal use is binary and overlooks the more nuanced reality in which most platforms operate.[310] In practice, digital infrastructures rarely fit neatly into one of these two extremes.[311] The very nature of platforms requires most of them to be at least partially open to third parties.[312] Platforms combine a stable core that defines the rules with a diverse, peripheral layer that delivers most of the value through variety and complementarity.[313] Firms typically adopt a lifecycle approach, designing their business models, architectures and pricing strategies to align with their goals. Crucially, decisions about how

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308 Case C-233/23 *Android Auto*, paras 41-43.

309 See Case C-233/23 *Android Auto*, para 46, following the incentives analysis presented in Case C-165/19 P, *Slovak Telekom*, para 52.

310 Stylianou (2025); Mario Zúñiga, 'The Android Auto Decision and the European Antitrust Paradox' (2025) Truth on the Market, <https://truthonthemarket.com/2025/04/02/the-android-auto-decision-and-the-european-antitrust-paradox/> accessed 20 April 2025.

311 Thomas R. Eisenmann, Geoffrey Parker and Marshall Van Alstyne, 'Opening Platforms: How, When and Why?' in Annabelle Gawer (ed), *Platforms, Markets and Innovation* (Edward Elgar Publishing 2009).

312 Kevin J Boudreau, 'Platform Boundary Choices & Governance: Opening-Up While Still Coordinating and Orchestrating' in Jeffrey Furman and others (eds), *Advances in Strategic Management* (vol 37, Emerald Publishing Limited 2017); Joel West, 'How Open is Open Enough? Melding Proprietary and Open Source Platform Strategies' (2003) 32(7) Research Policy 1259 <https://ssrn.com/abstract=894363> accessed 3 May 2025.

313 Carliss Young Baldwin and Jason C Woodard, 'The Architecture of Platforms: A Unified View' in Annabelle Gawer (ed), *Platforms, Markets and Innovation* (Edward Elgar Publishing 2009)

open the platform should be are made intentionally as part of a broader, integrated strategy.[314] Barnett explains that digital platforms must attract key users, like app developers, to gain scale, often by offering free access. But as platforms grow, they may raise prices. To balance this, Barnett describes that they typically adopt hybrid models with both open and closed access elements.[315]

The Court's binary framing of open versus closed platforms may, according to critics, in turn affect dominant undertakings' choice of business models. Before *Android Auto*, dominant firms' choices regarding product design and business models were largely beyond the reach of competition law. The same applied to decisions about how open to make infrastructure, which were generally compatible with Article 102 TFEU unless indispensable.[316] However, the *Android Auto* case significantly expands the policy space available to authorities, as platforms that are even partially open no longer benefit from the protection afforded by the indispensability requirement. As a result, dominant undertakings may need to reconsider their product design and business models more frequently than has been done in the past.[317] Moreover, even so-called 'closed' or 'walled garden' platforms are unlikely to be excluded from this new doctrine. Even these are often built with some degree of third-party interaction in mind, unlike legacy utilities infrastructure, which may remain outside the doctrine's reach.[318]

A possible middle way, as elaborated by Stylianou[319], would have been the objective justification where granting access would conflict with the platform's economic model or purpose, as proposed by AG Medina.[320] Had the Court followed AG Medina's interpretation, dominant firms could at least have argued that compelled access would disrupt their economic model or purpose, such as ongoing platform development.[321] However, the Court's decision foreclosed that possibility.

### 5.1.3 Broader Implications and Scope

The *Android Auto* judgment marks a turning point in how EU competition law deals with digital platform behaviour, especially conduct that hinders access in terms of interoperability. The potential reach and implications of the judgment have already been discussed by various scholars, although this is

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[314] Stylianou (2025), p. 7.

[315] Jonathan M. Barnett, 'The Host's Dilemma: Strategic Forfeiture in Platform Markets for Informational Goods' (2011) 124(8) Harvard Law Review 1861.

[316] Ibáñez Colomo (2025), 'Case C-233/23, Android Auto (III): Implications of the Judgment'; Pablo Ibáñez Colomo, 'Product Design and Business Models in EU Antitrust Law' (2021) SSRN <https://ssrn.com/abstract=3925396> accessed 13 April 2025

[317] Ibáñez Colomo (2025), 'Case C-233/23, Android Auto (III): Implications of the Judgment'; Stylianou (2025).

[318] Stylianou (2025), p. 14.

[319] ibid, p. 12.

[320] Case C-233/23 *Android Auto*, opinion of AG Medina. para 80.

[321] Stylianou (2025), p. 11.

ultimately a question for EU and national courts to develop through jurisprudence. However, some initial considerations can already be made.

Some scholars have portrayed the judgment as narrowly framed, arguing that it reflects a cautious and principled application of Article 102 TFEU. This view is reinforced by the fact that the judgment appears more restrained than that of the AGCM, whose legal analysis relied on broader and more interventionist grounds.[322] Monti argues that the judgment does not dilute existing abuse standards, as case law had already established the inapplicability of the *Bronner* test when the dominant company has granted access. In his view, the judgment favours technology platforms by allowing them to invoke a security defence, an argument typically not accepted in other sectors.[323]

Others argue that the judgment signals a broader evolution in the treatment of dominant firms operating in digital markets, particularly regarding their obligations to grant access to third parties, with potentially far-reaching implications.[324] According to Colomo, the judgment may have broader implications extending beyond the specific circumstances of *Android Auto*. [325] By focusing on the 'applicability' of *Bronner* rather than the 'interpretation' of *Magill/IMS Health*, the judgment provides limited guidance on case-specific factors, thereby creating scope for intervention in other disputes involving digital platforms.[326]

Stylianou has conducted a thorough analysis of the case and identified areas where the new *Android Auto* doctrine permits either narrow or broad interpretation, depending on the approach adopted. Stylianou characterises the narrow interpretation as deriving from the operative provisions of the judgment, while the broad interpretation draws on the *obiter dicta* and the reasoning in AG Medina's opinion.[327] This logic is deliberated upon below.

While the Court's *dispositif* refers to a 'digital platform' developed not solely for the needs of the dominant undertaking, its reasoning frequently speaks in broader terms of 'infrastructure'.[328] In acknowledging the referring court's position, the Court describes Android Auto as 'a piece of infrastructure in the digital sector'.[329] It then asks whether this 'infrastructure' was developed solely for the firm's own use or with the intention of enabling third-party access.[330] When developing the new doctrine, AG Medina is even more explicit

[322] Monti (2025); Koolen (2022).
[323] Monti (2025), p. 12.
[324] See e.g Stylianou (2025); Colangelo (2025); Ibáñez Colomo (2025).
[325] Ibáñez Colomo, 'Case C-233/23, Android Auto (I): How the Case Was Transformed before the Court of Justice' (2025).
[326] ibid.
[327] Stylianou (2025), p. 12.
[328] Case C-233/23 *Android Auto*, paras 39-47.
[329] Case C-233/23 *Android Auto*, para 34.
[330] ibid, para 47.

in this regard, stating that Bronner's conditions are 'not intended to apply where the *infrastructure* concerned is opened to other operators on the market'.[331] Taken together, this language suggests that the obligation to grant access may apply to all types of infrastructure, not just digital platforms, so long as the infrastructure was not developed solely for internal use.[332] Ibáñez Colomo agrees on this point, arguing that the new interpretation in *Android Auto* is not clearly limited to digital platforms, as many inputs or platforms can serve multiple purposes and there is no indication that the revised reading of *Bronner* will be applied differently based on the sector.[333]

If infrastructure is indeed the relevant asset, the obligation stemming from the *Android Auto* case would need to be read in broad terms. In such a case, the firm's obligation would not be limited to ensuring interoperability alone. Instead, it may include a broader duty to provide access or to engage in commercial dealings with competitors. Interoperability represents a subset of access, appropriate for certain digital contexts, but not necessarily applicable to physical or hybrid infrastructure.[334] The Court's repeated reference to 'access' rather than solely 'interoperability' supports this broader interpretation. This wording appears both in the analysis of investment incentives[335] and in the analysis of requiring the dominant undertaking to develop additional mechanisms enabling access.[336] The Court alternates between describing Google's conduct as a 'refusal to supply' and a 'refusal to develop the template', framing both as potentially abusive.[337] This further suggests that the obligation encompasses facilitating access in whatever form is necessary, not solely enabling interoperability.[338] Ibáñez Colomo also highlights an important definitional issue regarding the meaning of 'open to third-party undertakings'. The boundaries of this concept are not clearly defined. For instance, if an operating system is accessible to third-party application providers but not licensed to third-party device manufacturers, it remains unclear whether *the Bronner* framework applies when the latter seek access.[339]

Perhaps most notably, the Court held that the absence of a necessary interoperability mechanism, such as the template needed to integrate Enel's app, does not constitute a valid justification for refusing interoperability.[340] Stylianou argues that it would make sense that any type of missing mechanism for ac-

[331] Case C-233/23 *Android Auto*, opinion of AG Medina, para 35.
[332] Stylianou (2025), p. 13.
[333] Ibáñez Colomo (2025), 'Case C-233/23, Android Auto (II): How the Judgment Departs from Magill/IMS Health (and Bronner)'.
[334] Stylianou (2025), p. 13.
[335] Case C-233/23 *Android Auto*, paras 39-47.
[336] ibid, paras 69-79; Case C-233/23 *Android Auto*, Opinion of AG Medina, para 46.
[337] Case C-233/23 *Android Auto*, para 68.
[338] Stylianou (2025), p. 14.
[339] Ibáñez Colomo, 'Case C-233/23, Android Auto (III): Implications of the Judgment' (2025).
[340] Case C-233/23 *Android Auto*, para 81.

cess would fail to qualify as an objective justification if the scope of the obligation extends beyond merely granting interoperability to a digital platform. AG Medina's opinion reinforces this reading, describing such obligations as requiring 'active behaviour'[341] including the development of necessary software. Her wording leaves room for interpreting this duty more broadly. What is required may vary depending on the type of infrastructure in question.[342] A broader interpretation implies that a dominant undertaking is required to make its infrastructure available to competitors whenever it was not developed solely for internal use and denial of access would hinder competition. In contrast, a narrower view confines this duty to infrastructure operating as a digital platform, subject to tailored access conditions.[343]

## 5.2 The Interaction Between Article 102 TFEU and the DMA

Understanding the reach of the *Android Auto* judgment also requires considering its interaction with the DMA. Since many undertakings that qualify as dominant under Article 102 TFEU may also be designated as gatekeepers under Article 3 DMA, the overlap creates a complex regulatory landscape. AG Medina recognised this overlap, noting that the case emerged just as the DMA came into force, raising questions about whether interoperability should be regulated by legislation rather than antitrust enforcement.[344] Nevertheless, the Court reaffirmed that Article 102 retains a central role, even in areas where the DMA now applies.

Following the judgment in *Android Auto*, firms operating platforms now face a layered and sometimes overlapping legal framework. In cases where a platform was built strictly for internal use, the traditional EFD will still apply. If the firm is also a gatekeeper, the DMA obligations kick in. However, in the more typical scenario where infrastructure was developed for use beyond the firm itself, *Android Auto* creates a new legal standard, layered on top of the DMA when applicable.[345] Depending on the legal basis invoked, dominant undertakings may be required to develop mechanisms to enable access and face differing opportunities to invoke justification grounds or seek compensation.

The scope of interoperability obligations may differ with regards to both the personal and material scope depending on the legal regime. Whilst the DMA applies to gatekeepers,[346] *Android Auto* applies to dominant undertakings more generally.[347] The threshold for establishing dominance under Article

[341] Case C-233/23 *Android Auto*, Opinion of AG Medina, para 63.
[342] Stylianou (2025), p. 15.
[343] Stylianou (2025).
[344] Case C-233/23 *Android Auto*, Opinion of AG Medina, para 6.
[345] Stylianou (2025), p. 20.
[346] Article 3 DMA; Section 2.3.3.
[347] Article 102 TFEU; Section 3.1.

102 TFEU should generally be higher than the criteria used to designate gatekeepers under the DMA, a difference rooted in the DMA's aim to address enforcement gaps in competition law.[348] While Article 102 applies broadly to all types of undertakings, the DMA is limited to those offering CPS. This means that not all gatekeepers will meet the dominance standard under Article 102 and, conversely, not all dominant firms will fall within the DMA's scope if their services do not qualify as CPS. However, there is partial overlap. Some companies may fall under both regimesmaking them subject to parallel obligations.

As discussed in section 5.1.3, the reach of inputs covered in the *Android Auto* doctrine varies depending on whether one adopts a narrow or broad interpretation.[349] At its broadest, the ruling could extend access obligations to any competing product or service seeking to connect with infrastructure controlled by a dominant undertaking, not just competitors' apps. This stands in contrast to the DMA, which clearly limits its interoperability obligations to the specific categories of software applications, app stores and hardware providers, all in relation to the gatekeeper's operating system.[350] In a narrow reading, the *Android Auto* doctrine might in fact apply to a smaller subset of asset seeking access than the DMA, capturing only competitor apps. However, both the narrower reading of 'platform' and the broader concept of 'infrastructure' used in *Android Auto* as to describe the asset through which access is sought, are conceptually broader than 'operating system'.

Regarding the nature of the obligation, under *Android Auto*, dominant firms must provide either interoperability or broader forms of access and commercial dealing, depending on the interpretation adopted. Meanwhile, the DMA more specifically mandates interoperability and effective use of, and installation into, gatekeepers' systems for hardware and software.[351] As a competition law instrument, *Android Auto* imposes additional thresholds not present in the DMA as a regulatory tool. Specifically, the Court requires that granting access must make the rival's offering more attractive to consumers and that denying access must hinder competition. These conditions reflect the fact that *Android Auto* derives from antitrust rather than regulation, making its application somewhat narrower than the DMA, at least formally. Nevertheless, once these thresholds are satisfied, the substantive obligations under *Android Auto* may prove more expansive. Regarding objective justifications for refusing interoperability, *the Android Auto* judgment permits refusals based on integrity, security, or technical infeasibility,[352] whereas the DMA explicitly provides only for the first two grounds.[353]

[348] See section 2.3.
[349] See section 5.1.3 and Stylianou (2025).
[350] Article 6(4) and 6(7) DMA.
[351] ibid.
[352] Case C-233/23 Android Auto, para 81.
[353] Articles 6(4) and 6(7) DMA.

Even though the DMA was created to address situations such as those occurring in *Android Auto*, traditional competition law continues to serve as a fallback mechanism with its general scope. Unlike the DMA, which limits its scope to designated 'gatekeepers' and 'core platform services'[354], competition law paradoxically allows for potentially even wider application. The *Android Auto* judgment opens the door to broader enforcement, as the obligation to ensure access is not confined to a specific class of services or undertakings.[355]

There are obvious situations where the DMA and Article 102 could be applied to the same conduct. Previously, we had the self-preferencing abuse developed through *Google Shopping* under Article 102, which now also exists in Article 6(5) of the DMA. This overlap is now even more evident, with interoperability obligations occurring under both Article 102 and the DMA. Based on the narrow reading presented in section 5.1.3 and as further clarified in this section, the following table summarises, in simplified form, how the regimes differ across enforcement type, burden of proof and legal thresholds..

| **Legal regime** | **Type of enforcement** | **Burden of proof** | **Gatekeeper status** | **Dominance** | **Duty to interoperate** |
|---|---|---|---|---|---|
| **Art. 6(7) DMA** | *Ex ante* | Obligations apply automatically | Required | Not required | Yes, automatically |
| ***Android Auto* criteria (Art. 102 TFEU)** | *Ex post* | Abuse of dominance must be proven | Not required | Required | If platform is *open* to third parties |
| ***Bronner* criteria (Art. 102 TFEU)** | *Ex post* | Abuse of dominance must be proven | Not required | Required | If facility is *indispensable* |

*Table 1: Different legal regimes and their obligations.*

While competition law permits expansive intervention as demonstrated in *Android Auto*, its practical application in this context remains limited. Implementing effective interoperability through antitrust enforcement introduces complex technical challenges, both in designing appropriate remedies and ensuring their enforcement over time. The monitoring and verification of compliance become particularly problematic when remedies require constant technical adaptation.[356] Given these difficulties, regulatory mechanisms such as the DMA retain significant relevance. The structured and proactive nature

[354] See section 2.3.3.
[355] Colangelo and Ribera Martinez (2025), p. 7.
[356] Colangelo and Ribera Martinez (2025), p. 7.

of *ex ante* frameworks and regulatory intervention makes the DMA more suitable for handling interoperability obligations than case-by-case antitrust enforcement.[357]

The *Android Auto* judgment steps into territory the DMA was intended to cover, yet offers little explanation as to why antitrust enforcement remains necessary alongside this newer regulatory framework. The overlap between the facts of *Android Auto* and the regulatory scope of the DMA raises the question whether this is a case of competition law complementing regulation or one of overreach.[358] The judgment arguably imposes obligations that go further than what the DMA envisages, potentially challenging the balance between legislative design and judicial interpretation and raising questions about consistency and coherence. After all, the DMA was designed to calibrate platform obligations and balance innovation incentives with competition concerns.[359] The fact that *Android Auto* imposes broader duties in certain areas may signal judicial dissatisfaction with the DMA's scope[360] or at least a willingness to supplement it through case law.

This overlap also brings to light procedural concerns, particularly the risk of parallel enforcement. The fact that the DMA does not preclude parallel proceedings[361] increases the likelihood of dual enforcement for the same conduct, raising important questions regarding the principle of *ne bis in idem*. When multiple legal regimes impose obligations on the same conduct, the principle of *ne bis in idem*, which requires respect for fundamental rights, becomes relevant.[362] However, as discussed in section 2.3, the DMA aims to complement, not replace, enforcement under Article 102 TFEU.[363] It operates under a different legal basis as a harmonisation measure under Article 114 TFEU[364] and pursues distinct objectives, adding 'contestability' alongside 'fairness'.[365] As the DMA pursues distinct objectives from Article 102, at least in formal terms, the *ne bis in idem principle* will generally not apply. In cases of duplication, the DMA could probably be justified under Article 50 of the Charter or under the 'SCCST' test, as further developed in doctrine.[366]

[357] Bourreau (2022).
[358] Stylianou (2025), p. 3.
[359] See Kokott and Serafimova (2025).
[360] Colangelo (2025), p. 19 f.
[361] Patrick Harrison, Monika Zdzieborska and Bethany Wise, 'Navigating Ne bis in Idem: Bpost, Nordzucker and the Digital Markets Act' (2022) 21(2) Competition Law Journal <https://doi.org/10.4337/clj.2022.02.01> p. 57.
[362] Article 51 CFR.
[363] Recitals 5 and 11 DMA.
[364] Hiltunen (2022), p. 1228.
[365] Recital 10 DMA and Article 1(1) DMA.
[366] See Annegret Engel, Xavier Groussot, and Emilia Holmberg 'The Digital Markets Act and the Principle of Ne Bis in Idem: A Revolution in the Enforcement of EU Competition Law?' in: Annegret Engel, Xavier Groussot and Gunnar Thor Petursson, *New Directions in Digitalisation: Perspectives from EU Competition Law and the Charter of Fundamental Rights* (vol 13, Springer 2025), pp. 209 and 216.

The influence of the DMA on the interpretation of Article 102 TFEU, and vice versa, is increasingly evident. This is further reinforced by the application of DMA-like concepts in *Android Auto* and *Google Shopping*, where the Commission invoked forms of interoperability and self-preferencing that closely mirror the obligations under Articles 6(7) and 6(5) of the DMA, respectively. These cases demonstrate how *ex post* enforcement is beginning to reflect the logic of *ex ante* regulation, highlighting a growing interdependence between the two regimes. Against this background, Article 7 of the DMA, not previously addressed in this thesis, becomes particularly relevant. It empowers the Commission to shape the practical implementation of platform obligations by mandating standard setting and the adoption of technical protocols.[367] In doing so, the Commission may gradually develop a body of soft law comprising guidelines, best practices and interpretative tools that not only support DMA enforcement but also inform the application of Article 102 TFEU.

Over time, this potential mutual influence could lead to a form of doctrinal convergence, where competition law and regulation begin to reflect a common understanding of digital platform dynamics. As both regimes address similar challenges, a more unified and integrated approach may emerge. This convergence could ultimately blur the distinction between enforcement and regulation in the digital economy, reshaping the legal landscape for dominant platforms. Whether this evolution is desirable, whether it will materialize, or whether the path taken will lead elsewhere remains to be seen. However, it will undoubtedly be a development worth observing due to the continuing increasing scale and complexity of the digital era. It is not a question about *if*, but rather *how*, further changes will continue to emerge, both regulatory and jurisprudential.

[367] Article 7 DMA.

# 6 Conclusion

Against the background of broader shifts in EU competition law with regards to digital markets, this thesis has shown that the *Android Auto* judgment marks a clear departure from the EFD as established in *Bronner* and *Magill*. By establishing a duty to ensure interoperability to open and semi-open digital platforms even when the input is not indispensable, the Court moves closer to the regulatory approach embodied in the DMA and narrows the space traditionally protected by the freedom to conduct a business and right to property. In doing so, it blurs the line between antitrust enforcement and regulation, signalling a new phase where *ex post* intervention may achieve what was once thought possible only through *ex ante* rules, at least in the context of digital markets

A central change introduced by the Court is the replacement of the indispensability requirement with a focus on attractiveness. Whereas *Bronner* confined intervention to cases in which the requested input was indispensable for market participation, *Android Auto* accepts that a refusal may constitute abuse even when the input is not essential, provided that access would make the product more attractive to users. This development substantially lowers the threshold for intervention and reflects the growing importance of data access, user engagement and network effects as determinants of competitive advantage in digital ecosystems. The Court also relaxed the condition that a refusal must eliminate all competition in the downstream market. It is now sufficient that the conduct is capable of hindering the development of competition, confirming a gradual movement towards an effects-based and economically contextual assessment under Article 102 TFEU. [368]

Another significant aspect of the judgment is the recognition of a potential duty to develop new infrastructure. The Court held that a dominant undertaking may, in certain circumstances, be required not only to grant access to existing interfaces but also to create an interoperability mechanism where none currently exists.[369] This extends competition law into territory traditionally associated with regulatory intervention, illustrating a closer alignment between the preventive rationale of *ex ante* regulation and the corrective logic of *ex post* enforcement, and ultimately raises the question of whether the Court now intends to treat open digital platforms as public utilities.[370]

The *Android Auto* judgment does not merely depart from the old rules, it introduces a new approach to refusals to supply for digital platforms. It carries potentially far-reaching implications, with different elements of the judgment

[368] See sections 4.4 and 5.1.1.
[369] See sections 4.4 and 5.1.1.
[370] See sections 5.1.1 and 5.2.

opening for broader interpretations beyond the sole dispositif.[371] It significantly lowers the enforcement threshold under Article 102 TFEU and shifts the assessment away from narrowly defined criteria towards a more comprehensive examination of market dynamics and competitive effects. The Court's binary distinction between open and closed infrastructures also raises questions. Most digital platforms operate on hybrid models that combine proprietary control with selective openness. Applying a categorical distinction risk oversimplifying the technological and economic reality of these markets. Such ambiguity could affect investment incentives and innovation, while at the same time broadening the reach of competition law beyond its traditional limits.[372]

The *Android Auto* doctrine now operates alongside both the EFD and the DMA. While the former continues to govern closed infrastructures developed solely for internal use, and the latter imposes automatic obligations on designated gatekeepers, the *Android Auto* framework applies to open or semi-open platforms gatekeepers or not. This layered enforcement structure provides flexibility for addressing market failures but also creates potential overlap and tension between competition law and regulation. Although the DMA and Article 102 TFEU differ in their legal basis and enforcement logic, their convergence is increasingly evident. The DMA establishes sector-specific, *ex ante* obligations such as interoperability obligations, while Article 102 remains an *ex post* instrument requiring case-by-case analysis. However, *Android Auto* demonstrates that competition law can impose obligations beyond those codified in the DMA, particularly for dominant firms that do not qualify as gatekeepers or where the relevant infrastructure lies outside the DMA's defined scope. This interaction allows antitrust enforcement to complement the regulatory framework by addressing residual gaps and maintaining the effectiveness of competition law in fast-moving digital markets.[373]

The coexistence of these frameworks brings both opportunities and risks. On one hand, this convergence allows authorities to address the conduct of digital platforms more comprehensively. On the other hand, it raises concerns about potential legal fragmentation, inconsistent standards, and the erosion of fundamental freedoms and rights. Dominant undertakings may face interoperability obligations under *Android Auto* even when not covered by the DMA, while competition authorities might rely on Article 102 TFEU to impose duties that parallel those in the regulation. Despite these tensions, the two frameworks are beginning to influence one another. For instance, the *Android Auto* judgmnet illustrates how concepts central to the DMA, such as contestability and platform openness, are now impacting the application of Article 102 TFEU. Simultaneously, competition law could influence the practical implementation of the DMA, potentially creating more seamless frameworks

[371] See section 5.1.3.
[372] See section 5.1.2.
[373] See section 5.2.

through guidelines and soft law tools inspired by findings in antitrust cases and investigations.[374]

Ultimately, the *Android Auto* judgment demonstrates that digital EU competition policy is entering a new phase, characterised by the coexistence of overlapping yet complementary legal regimes. Whether this convergence will lead to greater coherence or increased complexity remains uncertain. The future scope of the *Android Auto* doctrine, and its relationship with both the EFD and the DMA, will depend on how the CJEU and national courts continue to define the balance between antitrust enforcement, innovation incentives and regulatory intervention.

[374] See section 5.2.

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