

cerre

Centre on Regulation in Europe



DMA SWITCHING TOOLS AND CHOICE SCREENS

ISSUE PAPER

November 2022

Amelia Fletcher



As provided for in CERRE's bylaws and procedural rules from its “Transparency & Independence Policy”, all CERRE research projects and reports are completed in accordance with the strictest academic independence.

This paper is part of a larger CERRE project entitled ‘Effective and Proportionate Implementation of the DMA’ which is a collection of nine papers focusing on the trade-offs around the different possible interpretations of the regulation. The project, within the framework of which this report has been prepared, received the support and/or input of the following CERRE member organisations: Apple, Arcep, ARCOM, Booking.com, Comreg, DuckDuckGo, Google, Mediaset, Meta, Microsoft, Ofcom, Qualcomm, Spotify, TikTok, Vodafone. However, they bear no responsibility for the contents of this report. The views expressed in this CERRE report are attributable only to the authors in a personal capacity and not to any institution with which they are associated. In addition, they do not necessarily correspond either to those of CERRE, or of any sponsor or of members of CERRE. The author would also like to thank the European Commission and the European Consumer Organisation (BEUC) for their useful input to the project.

© Copyright 2022, Centre on Regulation in Europe (CERRE)

info@cerre.eu – www.cerre.eu



TABLE OF CONTENTS

ABOUT CERRE.....	3
ABOUT THE AUTHORS.....	4
1. INTRODUCTION	5
2. THE DMA AND ITS OBJECTIVES.....	6
2.1. The relevant provisions.....	6
2.2. Intention of the provisions.....	7
2.3. The importance of ‘choice architecture’ in the DMA.....	9
3. QUESTIONS OF INTERPRETATION AND CHALLENGES FOR IMPLEMENTATION	11
3.1. Scope issues	11
3.2. Effectiveness issues: Articles 6(3)(ii) and 6(4)(ii).....	15
3.3. Mitigating unintended consequences: Article 6(4)(ii).....	17
3.4. Effectiveness issues: Article 6(3)(iii)	18



ABOUT CERRE

Providing top quality studies and dissemination activities, the Centre on Regulation in Europe (CERRE) promotes robust and consistent regulation in Europe's network and digital industries. CERRE's members are regulatory authorities and operators in those industries as well as universities.

CERRE's added value is based on:

- its original, multidisciplinary and cross-sector approach;
- the widely acknowledged academic credentials and policy experience of its team and associated staff members;
- its scientific independence and impartiality;
- the direct relevance and timeliness of its contributions to the policy and regulatory development process applicable to network industries and the markets for their services.

CERRE's activities include contributions to the development of norms, standards and policy recommendations related to the regulation of service providers, to the specification of market rules and to improvements in the management of infrastructure in a changing political, economic, technological and social environment. CERRE's work also aims at clarifying the respective roles of market operators, governments and regulatory authorities, as well as at strengthening the expertise of the latter, since in many Member States, regulators are part of a relatively recent profession.



ABOUT THE AUTHORS



Amelia Fletcher¹ CBE is a Research Fellow at CERRE and a Professor of Competition Policy at the Centre for Competition Policy, University of East Anglia. She is also a Non-Executive Director at the UK Competition and Markets Authority and a member of the Enforcement Decision Panel at Ofgem.

From 2013/4 to 2020, she was a Non-Executive Director at the Financial Conduct Authority and the Payment Systems Regulator, and has been a member of DG Comp's Economic Advisory Group on Competition Policy. She was a member of the Digital Competition Expert Panel, commissioned by the UK Treasury and led by Jason Furman, which reported in March 2019.

She was previously Chief Economist at the Office of Fair Trading (2001-2013), where she also spent time leading the OFT's Mergers and Competition Policy teams. Before joining the OFT, she was an economic consultant at Frontier Economics (1999-2001) and London Economics (1993-1999).

She has written and presented widely on competition and consumer policy. In her ongoing research, Amelia has a particular interest in the implications for competition and consumer policy of behavioural economics and online markets.

Amelia has a DPhil and MPhil in economics from Nuffield College, Oxford.

¹ Amelia Fletcher is Professor of Competition Policy at the University of East Anglia and a Non-Executive Director at the UK Competition and Markets Authority. This paper is written in her academic capacity and does not necessarily represent the views of the CMA.



1. INTRODUCTION

In the years preceding the adoption of the Digital Markets Act (DMA), there had been growing concern, reflected in a variety of competition cases, regarding the ability of the largest gatekeeper platform firms to leverage from one service into another, by making their proprietary offering the ‘default’ for users.

For example, the European Union’s (EU) 2018 *Google Android* decision found Google to have breached competition law when it required Android device manufacturers to pre-install and make prominent several of its apps (and in particular Google Search) as a condition of access to Google’s must-have Play app store.²

Such defaults are important for both positive and negative reasons. On the positive side, they enable end users to start using services as easily as possible, without having to make too many upfront decisions. On the negative side, end users are strongly inclined to accept the default options they are given and to stick with these over time. This means that making proprietary services ‘default’ options can act as *de facto* tying, and thereby enable firms to leverage market power from one service to another.³

Such *de facto* tying is especially likely to be anti-competitive where (i) the core (tying) service is a critical gateway for end users to the related (tied) services; and (ii) end users are not easily able to change their choices (for example, to terminate and switch their default option) over time.

A few different provisions within Article 6 of the DMA aim to address some of these problems in relation to gatekeeper undertakings. The particular focus of **Article 6(3)** is leverage from Operating Systems, Browsers and Virtual Assistants into other services. The particular focus of **Article 6(4)** is leverage from Operating Systems into App Stores and Apps. **Article 6(6)** then focuses on enabling take-up of – and switching to – third-party services, while **Article 6(13)** relates to enabling the termination of proprietary services.⁴

This issue paper covers these measures, with the focus being on Articles 6(3) and 6(4). It begins with a brief overview of the wider context of the DMA before describing the key measures and their intentions. It highlights some intrinsic challenges associated with any requirements that seek to change end-user behaviour. It then examines each of the provisions in more detail, highlighting questions of interpretation, and finally emphasising some possible limitations to their effectiveness.

² Commission Decision of 18 July 2018, Case 40 099 *Google Android*.

³ The General Court judgment in *Google Android* confirms that pre-installation combined with status quo bias can lead to *de facto* tying: Case T-604/18 *Google v. Commission*, ECLI:EU:T:2022:541.

⁴ The DMA’s end user data portability provision, Article 6(10) is also relevant to end user switching. It is not considered here, as it is the subject of a companion CERRE paper.



2. THE DMA AND ITS OBJECTIVES

The DMA has two overarching aims: contestability and fairness. Both are relevant to these provisions. If they are effective in limiting the leverage of market power from one service to another, this will clearly enhance **contestability** for (at least) these latter services. At the same time, by re-leveling the playing field between proprietary and third-party services, they should also promote **fairness**.

The objectives are important. Given the purposive nature of EU law, they provide general context for the interpretation of the DMA provisions, but they are also explicitly relevant under Article 8. Specifically:

Article 8(1)

*The gatekeeper shall ensure and be able to demonstrate compliance with the obligations laid down in Articles 5, 6 and 7 of this Regulation. The measures implemented by the gatekeeper to ensure compliance with those Articles **shall be effective in achieving the objectives of this Regulation** and of the relevant obligation.*

2.1. The relevant provisions

Articles 6(3) and 6(4) are both complex provisions, with several elements. For ease throughout the rest of the paper, we have separated these into numbered sub-elements.

Article 6(3)

- (i) *The gatekeeper shall allow and technically enable end users to **easily un-install any software applications** on the operating system of the gatekeeper, without prejudice to the possibility for that gatekeeper to restrict such un-installation in relation to software applications that are essential for the functioning of the operating system or of the device and which cannot technically be offered on a standalone basis by third parties.*
- (ii) *The gatekeeper shall allow and technically enable end users to **easily change default settings** on the operating system, virtual assistant and web browser of the gatekeeper that direct or steer end users to products or services provided by the gatekeeper.*
- (iii) *That includes **prompting** end users, at the moment of the end users' first use of an online search engine, virtual assistant or web browser of the gatekeeper listed in the designation decision pursuant to Article 3(9), **to choose, from a list** of the main available service providers, the online search engine, virtual assistant or web browser to which the operating system of the gatekeeper directs or steers users by default, and the online search engine to which the virtual assistant and the web browser of the gatekeeper directs or steers users by default.*

Article 6(4)

- (i) *The gatekeeper shall allow and technically enable the installation and effective **use of third-party software applications or software application stores using**, or interoperating with, its operating system and allow those software applications or software application*



stores to be accessed by means other than the relevant core platform services of that gatekeeper.

- (ii) The gatekeeper shall, where applicable, **not prevent the downloaded third-party software applications or software application stores from prompting** end users to decide whether they want to set that downloaded software application or software application store as their default. The gatekeeper shall technically enable end users who decide to set that downloaded software application or software application store as their default to carry out that change easily.*
- (iii) The gatekeeper shall not be prevented from taking, to the extent that they are strictly **necessary and proportionate, measures** to ensure that third-party software applications or software application stores do not endanger the **integrity** of the hardware or operating system provided by the gatekeeper, provided that such measures are duly justified by the gatekeeper.*
- (iv) Furthermore, the gatekeeper shall not be prevented from applying, to the extent that they are strictly **necessary and proportionate, measures** and settings other than default settings, enabling end users to effectively protect **security** in relation to third-party software applications or software application stores, provided that such measures and settings other than default settings are duly justified by the gatekeeper.*

Article 6(6)

The gatekeeper shall not restrict technically or otherwise the ability of end users to switch between, and subscribe to, different software applications and services that are accessed using the core platform services of the gatekeeper, including as regards the choice of Internet access services for end users.

Article 6(13)

The gatekeeper shall not have general conditions for terminating the provision of a core platform service that are disproportionate. The gatekeeper shall ensure that the conditions of termination can be exercised without undue difficulty.

2.2. Intention of the provisions

As discussed above, the core intention of these provisions is to promote contestability and fairness by reducing the potential for gatekeepers to leverage market power from one gateway service into others, by enabling and promoting the use of third-party services. However, they seek to achieve this in a variety of different ways.

Specifically, the provisions can be split into three key categories. Provisions that:

- (a) seek to enable **easy switching of defaults** by end users, including the ability to access **switching tools** and the **use of prompts** by third parties;
- (b) require the **use of initial choice screens** to force end users to make active choices; and



- (c) seek to **promote end user choice** – and thereby switching and multi-homing – more generally (including requirements relating to termination of service and uninstallation).

The following table summarises the aims and coverage of each of the provisions, based on this categorisation.

Table 1 Breakdown of the provisions

(a) Provisions seeking to enable easy switching of defaults

PROVISION	LIMIT LEVERAGE		ADDITIONAL DETAIL
	FROM	TO	
Art 6(3)(ii)	OS, web browsers or virtual assistants	Apps and services (NB including browsers, virtual assistants and search)	Enable easy switching of defaults
Art 6(4)(ii)	OS	Apps and app stores	Enable third-party prompts AND easy switching of defaults

(b) Provisions requiring the use of initial choice screens

PROVISION	LIMIT LEVERAGE		ADDITIONAL DETAIL
	FROM	TO	
Art 6(3)(iii)	OS, web browsers or virtual assistants	Search engine, virtual assistant and browser	Initial choice screen for default at first use of service

(c) Provisions seeking to promote end user choice generally

PROVISION	LIMIT LEVERAGE		ADDITIONAL DETAIL
	FROM	TO	
Art 6(4)(i)	OS	Apps and app stores	Enable effective use of third-party apps and app stores
Art 6(6)	Any gateway CPS	Apps and services accessed through CPS	Enable switching between, and subscription to, different apps and services
Art 6(3)(i)	OS	Apps	Enable un-installation of apps on a gatekeeper's OS
Art(13)	Any gateway CPS		Enable termination of gatekeeper CPS

As regards this final category, it should be noted that the term 'multi-homing' does not in fact come up within the provisions themselves. However, the key factor underpinning these provisions is the need for effective end user choice of service. This could in principle involve an end user switching service fully, but it could also involve multi-homing. In practice, where end users are reluctant to leave a gatekeeper's proprietary service completely, multi-homing may be a more realistic source of contestability than switching.



This final category is not discussed further in this paper. **The focus is on Articles 6(3)(ii), 6(3)(iii) and 6(4)(ii).** Article 6(4)(i) is, however, discussed in the companion CERRE Issue Paper on interoperability.

2.3. The importance of ‘choice architecture’ in the DMA

A key challenge for these various provisions is that their effectiveness depends critically on their impact on end user behaviour. For example, enabling end users to switch their defaults will only be effective in enhancing contestability if end users take advantage of these options.

At the same time, we know that most end users are inexperienced and that choice can be a mental burden, with end users typically disinclined to spend significant time making decisions. This is a key reason why online platforms focus on designing their systems in a user-friendly and trustworthy way. They seek to ensure that end users enjoy a smooth consumer journey, without having to make too many choices, and – where choices must be made – that this can be done so in a clear, quick and easy manner, with some protection against decisions that would be harmful. It is this very preference for a smooth and trusted consumer journey that gives default options their power. Given a default option, many end users will happily adopt it, and will not revisit that decision.

This means that the effectiveness of the DMA in promoting contestability and fairness requires more than simply enabling more end user choice. At the very least, **end users need to be able to make any choices easily, and ideally they need to be explicitly prompted or required to do so.** Recognition of this led to a number of late stage changes in wording in the DMA. For example, the wording in Article 6(3) and 6(4) relating to defaults and prompts is all new since the previous public draft of the DMA, as is the addition of the word ‘easily’ in these obligations.

More generally, however, end user choices will be critically impacted by the way in which those choices are presented to them – the so-called ‘choice architecture’ they face. End users frequently use heuristics to make decisions in the face of complexity. While such heuristics can be optimal, given the cost involved in more deliberative decision-making, they can nonetheless lead end users to exhibit **‘default bias’, ‘ranking bias’ and ‘saliency’ bias, whereby they tend to pick the default, highest ranked, or most salient or prominent options.** In many situations, these will also be the best options, but this need not be the case. End users are likely to be cautious, and thus likely to try out new options only if they are clear that they can reverse their decision easily. They will also have a natural tendency to choose the names they know. Finally, end users exhibit ‘status quo bias’ in terms of being inclined to stick with an existing service.⁵

These elements of end user behaviour can be ameliorated, or alternatively exploited, depending on the precise design of the **choice architecture** facing end users. As such, the choice architecture adopted by the platforms will be critical for the effectiveness of the DMA in achieving its objectives.

⁵ These various behavioural tendencies arise from the use of simple heuristics to deal with complex decision-making situations. The Competition and Markets Authority’s recent evidence review on [Online Choice Advertising](#) surveys the extensive academic research that has been carried out into the wide selection of such biases, while ‘status quo’ bias is much discussed in the 2018 EU decision on [Google Android](#) (recently upheld by the [ECJ](#)). [Fletcher \(2019\)](#) also discusses the relevance of behavioural insights for competition policy.



The DMA also recognises the importance of choice architecture in Article 13 (anti-circumvention), which mentions the structure and design of user interfaces specifically, as shown in the emboldened wording below.

Article 13(4)

*The gatekeeper shall not engage in any behaviour that undermines effective compliance with the obligations of Articles 5, 6 and 7 regardless of whether that behaviour is of a contractual, commercial or technical nature, or of any other nature, **or consists in the use of behavioural techniques or interface design.***

Article 13(6)

The gatekeeper shall not degrade the conditions or quality of any of the core platform services provided to business users or end users who avail themselves of the rights or choices laid down in Articles 5, 6 and 7, or make the exercise of those rights or choices unduly difficult, including by offering choices to the end-user in a non-neutral manner, or by subverting end users and business user's autonomy, decision-making, or free choice via the structure, design, function or manner of operation of a user interface or a part thereof.

These two Article 13 provisions, alongside the general effectiveness provisions within Article 8, are potentially very powerful in ensuring that the provisions discussed in this paper are effective.



3. QUESTIONS OF INTERPRETATION AND CHALLENGES FOR IMPLEMENTATION

The remainder of this paper sets out several questions relating to the interpretation of Articles 6(3) and 6(4). We consider questions of scope, as well as issues arising from the requirement to ensure that these provisions are effective in achieving the core DMA objectives of contestability and fairness. For the latter, we consider, Articles 6(3)(ii) and 6(4)(ii) first, and then Article 6(3)(ii).

In several cases, we highlight that clarification is required. In some cases, the Commission is well-placed to provide this clarification, for example through the Article 8 specification process or through formal guidance. In others, the clarification may require the Courts to opine.

3.1. Scope issues

(i) Application of Article 6(3) to non-standard browsers

Browsers are defined relatively widely under the DMA. **Article 2(11)** states that:

‘Web browser’ means a software application that enables end users to access and interact with web content hosted on servers that are connected to networks such as the Internet, including standalone web browsers as well as web browsers integrated or embedded in software or similar.

This definition clearly includes general use browsers such as Chrome, Safari or Firefox. But it would seem to be more inclusive than this.

First, under the definition above, **it seems likely that search apps would be classified as browsers, and that Article 6(3)(ii) should apply to them on that basis. However, this could usefully be clarified.**

This would in turn seem to have two significant implications.

- *In relation to choice of search engine:* Gatekeepers with their own designated search apps are required to open these up to offering alternative search engines, again under both Article 6(3)(ii) and Article 6(3)(iii); and
- *In relation to choice of browser:* Designated gatekeepers are required to treat third-party search apps as browser services when enabling users to change their default settings in relation to browsers under Article 6(3)(ii) and when providing an initial choice screen under Article 6(3)(iii).

The first of these seems broadly beneficial, not least because there is otherwise a risk that gatekeepers could subtly circumvent Article 6(3) by promoting their own search apps (which do not have to offer search engine choice) over their own browsers (which do).

There are, however, pros and cons of the first and of the second implication. On the positive side, it should be useful in driving contestability in both browsers and search, since it provides more opportunities for rival search engines to gain end users and increases the number of browser options available. On the negative side, third party search apps are not always full-function browsers. For



example, they may not allow for the direct entry of web addresses or for multiple tabs. If designated gatekeepers are required to treat such apps as browser services and offer them as default options alongside full-function browsers, this could potentially mislead consumers.

A similar situation applies to ‘in-app’ browsers, since these too will typically meet the definition of ‘browser’ under Article 2(11). These are browsers which are embedded within apps by default. Many of these in-app browsers use the OS’s own default web viewing software, but this need not be the case. These are designed to enable the viewing of web content only, and do not typically include a default search engine, but they could. Again, it is not obvious that it would be beneficial (and could be misleading) to allow end users to select such ‘in app’ browsers as their default browser, since they cannot be utilised on a stand-alone basis.

This suggests that **it may be appropriate for gatekeepers to place some minimum requirements on what functionality ‘browsers’ must offer in order to be chosen as a default, but any such criteria should be transparent and proportionate.**

(ii) Application of Article 6(3)(ii) to services other than browsers, virtual assistants and search engines

The Article 6(3)(ii) requirement to enable easy switching of defaults relates to:

*“default settings on its operating system, virtual assistant and web browser that direct or steer end users to products or services **provided by the gatekeeper.**”*

The clause which follows (Article 6(3)(iii)) goes on to talk specifically about browsers, virtual assistants, and search engines. But does this mean that Article 6(3)(ii) is restricted to these products or services? For example, if it provides a default mail app that opens up when a “mail to” link is clicked in a browser, it should be easy for end users to switch that default too. Calendar, Maps and audio players services can likewise act as defaults in a similar way.

In our view, **Article 6(3)(ii) should be interpreted as covering all products or services for which there is a default setting on its operating system, virtual assistant and web browser, and not just browsers, virtual assistants and search engines. Mail, Calendar, Maps and audio player services seem obvious examples.** There is no explicit wording limiting it to the narrower set of products, and the more expansive view also seems consistent with the “*That includes*” language at the start of Article 6(3)(iii).

It would be useful if this could be confirmed, however.

In addition, there is also a question as to whether Article 6(3)(ii) applies to ‘within browser’ defaults that are effectively part of the core browser product. We would suggest not. As an example, a browser itself inherently shows links, which a user can click on. It would make little sense for a user to have to specify the default browser that these links lead to. This would simply create a poor user experience and generate little benefit. Likewise, it seems unlikely that this provision is intended to apply to the default photo viewer that is used within the browser.



As such, **‘within browser’ defaults should arguably be out of scope. However, we note that the line between what is effectively part of the browser and what is distinct may well be subject to debate.** It would be useful to have clarification on these issues.

(iii) Application of Article 6(3)(ii) to non-proprietary defaults

The Article 6(3)(ii) requirement to enable easy switching of defaults relates to:

*“default settings on its operating system, virtual assistant and web browser that direct or steer end users to products or services **provided by the gatekeeper.**”* (Bold added)

The term ‘provided by the gatekeeper’ raises an important question. It clearly requires gatekeepers to enable switching of defaults where they currently provide their own proprietary service as a default. However, the situation is less clear in the context where they are provided under contract by a third-party service.

On the other hand, it could also be argued that the provision does apply to third-party defaults. Such defaults are still services ‘provided by the gatekeeper’. Moreover, Article 6(3)(ii) should arguably be read in the context of Article 8, which stresses the importance for effectiveness. Enabling easy switching for all default settings (irrespective of whether the firm has a proprietary service) would seem likely to be more effective in promoting contestability, at least where the third-party default service in question is itself designated as the proprietary offering of another gatekeeper.

Against this interpretation, the relevant Recital – which was written later than Article 6(3) itself and thus might provide a more final view, explicitly refers to gatekeepers’ *“own software applications and services”*, and *“the online search engine listed in the designation decision”*.

Recital 49

*Gatekeepers should also allow end users to easily change the default settings on the operating system, virtual assistant and web browser when those default settings favour **their own software applications and services.** This includes prompting a choice screen, at the moment of the users’ first use of an online search engine, virtual assistant or web browser of the gatekeeper listed in the designation decision, allowing end users to select an alternative default service when the operating system of the gatekeeper directs end users to those online search engine, virtual assistant or web browser and when the virtual assistant or the web browser of the gatekeeper direct the user to **the online search engine listed in the designation decision.*** [Bold added]

Overall, on the basis of Recital 49, Article 6(3)(ii) might seem most likely to apply only to those default settings which relate to a gatekeeper’s own proprietary services and not to defaults where services are provided under contract by a third party. However, the legal position on this important issue is complex and requires clarification.

In addition, the specific case of default settings for apps on operating systems, we note that there is also a potential link here with Article 6(4)(i). This requires that gatekeepers enable the ‘effective use’ of third-party apps and app stores with their operating system. One possible interpretation is requiring the easy switching of any relevant default settings within a designated Operating System



(albeit this does not apply to default settings within browsers or voice assistants). This requirement is not limited to situations where the gatekeeper has its own rival services. Again, it would be helpful to have more clarity on how Article 6(3)(ii) relates to Article 6(4)(i).

(iv) Application of Article 6(4)(ii) to pre-installed apps/app stores

Article 6(4)(ii) requires easy switching of default settings for third-party apps and app stores. However, **it formally applies to “downloaded third-party software applications or software application stores”**. (Underlining added)

As such, it seems to exclude any apps and app stores that have been pre-installed, meaning that they would not have the right to prompt end users to switch their default setting to them.

However, it could be argued that the effectiveness requirements of the DMA militate against taking a narrow view and excluding pre-installed apps and app stores from the application of Article 6(4)(ii). Indeed, this could even disincentivise third-party apps and app stores from seeking to be pre-installed, which –given the competitive benefits that can arise from being pre-installed – would not be good for contestability.

Overall, the restriction of Article 6(4)(ii) to downloaded apps does not seem in keeping with the contestability objective of the DMA. It is also noteworthy that the relevant Recital (50) refers only to third party apps and app stores and makes no reference to whether or not they are downloaded. However, the Recital could be viewed as having less power than the wording of the Article itself.

Overall, it would be useful to have clarification on this issue.

(v) The issue of multiple ‘access points’

For some services, end users potentially access them via a variety of different pathways. The most extreme example is search. If I want to search for something on the web: (i) I could go to a search app, (ii) I could go to a browser and use its default search service; (iii) I could search via the virtual assistant, and use its default search service, (iv) I could use text search/look-up from within an app and use its default search service; (v) I could search via a widget on my homescreen. This could potentially be a browser widget (with its own default search service) or a search widget.

This variety of different access points creates inherent complexity in terms of switching defaults. Suppose an end user wishes to switch to a new search engine across all of these services. If this has to be done separately for each one, they may be discouraged from switching at all, and thus the provisions to encourage such switching will be ineffective. This would not seem to be in keeping with the requirement that switching default should be easy, or the effectiveness and anti-circumvention provisions of Articles 8 and 13.

At the same time, there may be risks from being too prescriptive about requiring gatekeepers to enable users to switch a default across all access points at once, as it could restrict the ability of end users to pick and choose which search engines they wish to use where, and could even limit entry if not all search engines can function with all access points.



Overall, **we consider that Articles 6(3) and 6(4) could reasonably be interpreted as requiring gatekeepers to enable end users to choose to switch a default across all access points at once, but also – for those who are keen or for those services with more limited interoperability – to enable choices to be made separately for each individual access point.** Even in this latter case, however, the choice should be as easy as possible, for example with a set of tick boxes on a single screen.

We consider that this conclusion is relevant to both the ongoing switching tools required at Article 6(3)(ii), the initial choice screens for browsers, virtual assistants and search engines required under Article 6(3)(iii), and the ability to switch following a prompt under Article 6(4)(ii). It would be useful to have clarification of this issue.

3.2. Effectiveness issues: Articles 6(3)(ii) and 6(4)(ii)

The intention of enabling the easy switching of defaults is clear. By limiting the ability to gatekeepers to set the default choices, the expectation is that this will open these services up to greater competition. But what challenges arise in doing this?

(vi) Design of the Article 6(3)(ii) switching tools

Article 6(3)(ii) requires that the gatekeeper should enable easy switching of default settings on its OS, virtual assistant and web browser. But it is silent on what these switching tools should look like, and which, or how many, alternative providers it should be possible to switch to.

Formally, Article 6(3)(ii) would in fact be met if the gatekeeper were to provide a simple switching tool which literally just offered one alternative provider for each type of default service. However, it seems clear that providing such a restricted choice set would not be in keeping with the spirit of the DMA and would be unlikely to meet the general effectiveness requirements.

At the same time, it is not obvious that end users should be given a choice of all possible providers, even if they do not currently have their service installed on their device. First, this could be a long and unmanageable list, which creates ‘choice overload’ and thereby worsens decision-making. Second, the time involved in downloading and installing the service would worsen the consumer journey. Third, some of these providers may offer poor or unduly privacy-intrusive services. While these should certainly be available to consumers as default options if they so wish, it would be preferable to ensure they were only available to consumers that had made an active choice to download them.

In general, and especially given the link with the requirement for easy switching of default settings under Article 6(4)(ii), we conclude that **end users should be able easily to switch default settings on designated operating systems to (at least) all alternative options that are currently installed as an app or app store on the user’s device.**

For default settings on browsers and voice assistants, which are outside the scope of Article 6(4)(ii), the situation is less clear. However, given that end users are unlikely to be clear on the distinction between default settings and apps, the intention to make switching ‘easy’ could reasonably be interpreted as again requiring that **default choices should include (at least) the alternative options that are currently installed on the user's device.** For example, if a user specifically downloads and installs a particular search app, then that search engine should appear as a search engine option in the relevant browser or voice assistant.



In terms of the design of the switching tools, there are at least two key ways in which a switching tool could be designed:

- First, within the relevant app settings, the tool could comprise a prominent and simple to use ‘make this my default’ button; and
- Second, within a separate ‘default settings’ section, users could be offered a list of possible default services to choose between.

In practice, if switching default settings is to be made easy for all end users, irrespective of how they use their device, it seems reasonable to assume that both should be made available. In either case, it is important that users can access the switching tool easily, without having to click too many times or scroll too much.

The provision of any list of possible default options then raises another question: the ordering of these options. In general, these should be ordered in a way that allows for meaningful choice and is not misleading. Critically, we would argue that **the gatekeeper should not be allowed to charge providers a fee to be ranked higher on this list, and certainly (if this not accepted) that any fee should not be set on the basis of an auction.** This would seem to be in breach of Article 13(6), which requires the avoidance of non-neutral choice architecture. It would be useful if the EU Commission could confirm whether it supports these conclusions.

The DMA is, however, silent on the issue of whether gatekeepers could charge services for pre-installation (which would guarantee a place on the list). It is also silent on whether they could charge a fair, reasonable and non-discriminatory ongoing fee to providers who are successful in being chosen, potentially in the form of a share of revenues.

(vii) The need to be able to reverse decisions

Under Article 6(3)(ii), it is clearly intended that end users should be able to pro-actively switch default settings at any time. As discussed above, this implies that they should have ready access to an easy to use list of possible providers.

The situation is very different under Article 6(4)(ii). Here, it is intended that switching would result from an end user responding positively to a third-party prompt. As such, this provision would not necessarily require the existence of any such list of options. The user may simply see (or hear) a single choice box with two options: ‘switch’ or ‘don’t switch’.

This raises the issue of what happens if an end user chooses to switch a default via such a choice box, and then changes their mind. Will there be a way for them to simply reverse that decision? It would not be a good outcome if end users got stuck with default settings they did not like. The ability for an end user to reverse their decision is also important for giving them the confidence to switch in the first place. Without the ability to reverse a bad switching decision, they may simply avoid switching and this would not be good for contestability.

For app stores and some apps, this issue will arguably be solved by the requirement under Article 6(3)(ii) that gatekeepers must allow end users to easily change default settings on its operating



system. This would presumably apply at least to those app stores and apps that compete with “services provided by the gatekeeper”? However, it may not apply otherwise.

To ensure that Article 6(4)(ii) is effective in promoting contestability, **we would encourage the EU Commission to consider further the importance of enabling default switching decisions also to be easily reversed, including where the gatekeeper does not provide a competing service.**

(viii) The use of behavioural techniques to inhibit switching or induce switching back

Even if switching of defaults is enabled in principle, gatekeepers could potentially inhibit switching in practice through the use of behavioural techniques. For example, while it may be appropriate for gatekeepers to issue warnings to end users seeking to switch default, where this choice would genuinely create risk, such warnings could potentially be made **overly complex or unnerving**, and thus unduly deter switching. For end users who have already switched, the gatekeepers could issue **repeated prompts** to induce end users to switch the default back.

In our view, however, **it is likely that the disproportionate or discriminatory use by gatekeepers of behavioural techniques – such as prompts and warnings – to inhibit switching, or induce switching back, would be non-compliant with the DMA**, given (i) the word ‘easily’ in Articles 6(3)(ii) and 6(4)(ii), and (ii) the provisions described above in Articles 8 and 13. A/B testing may be valuable in determining on which side of the line any such conduct lies. **It would be useful for the Commission to clarify this.**

3.3. Mitigating unintended consequences: Article 6(4)(ii)

(ix) The risk of excessive prompts and choice fatigue

A potential unintended consequence of Article 6(4)(ii) could be that third part downloaded apps and app stores overwhelm end users with prompts to make their service their default. This could prove unpopular with end users and could also lead to ‘choice fatigue’ which stops end users making sensible decisions. This could lead to inertia or mistakes on the part of end users, either of which will reduce the effectiveness of this provision in driving contestability.

Recognising these sorts of factors, Article 5(1) places a limit on gatekeepers from re-requesting consent for data collection and usage more than once per year. However, **there is no similar limitation on the prompts of third parties in relation to switching defaults**, and gatekeepers are also prohibited from limiting these prompts (the only caveat to this provision relates to security).

This risk is not considered in the DMA. Gatekeepers may be able to mitigate the risk somewhat through their own interface design, but clearly there is a balance to be struck, however if gatekeepers go too far in doing so, they risk breaching the DMA.

Given the clear risk of ‘choice fatigue’ arising from excessive switching prompts by third parties, based on their rights under Article 6(4)(ii), it would be useful for the Commission to meet with



gatekeepers and third parties to seek solutions. More generally, this is an area that should be kept under review.

(x) The risk of unclear and misleading third-party prompts and ‘slamming’

Another risk with third party prompts is that they could be presented to end users in a way that is unclear or non-neutral. For example, end users could potentially receive prompts where the option of changing a default is very prominent relative to the option of not doing so. At an extreme, **they may not even realise they have agreed to switch a default setting.**

There may even be a potential risk of third parties’ misreporting the choices of end users to the gatekeepers, leading to end users’ **default settings being switched when they never chose this.**

Such fraudulent competition is not the form of contestability that the DMA is seeking to promote. It would also not be fair on those apps and app stores who adopt more neutral prompts. In telecoms, these practices are known as ‘slamming’, and new regulations and codes have been introduced to address it.

There is nothing currently within the DMA to address such issues. However, such misleading or fraudulent conduct would likely be prohibited under EU consumer law.⁶ The risk of such conduct could be mitigated through the gatekeepers’ user interface design. For example, they could ensure (i) that third party prompts are clear and consistent and (ii) that the user is then taken to the relevant setting page to make the switch, rather than making the switch directly.

While this would be positive, there is again a risk of the gatekeeper being overly prescriptive here and limiting contestability. **In designing its user interface to address the risk of end user harm arising from misleading third-party prompts and ‘slamming’, the gatekeepers therefore face a delicate balance. The Commission should meet with gatekeepers and third parties to consider solutions. More generally, this is an area that should be kept under review.**

3.4. Effectiveness issues: Article 6(3)(iii)

Article 6(3)(iii) includes a requirement that gatekeepers must prompt end users *“to choose, from a list of the main available service providers, the online search engine, virtual assistant or web browser to which the operating system of the gatekeeper directs or steers users by default, and the online search engine to which the virtual assistant and the web browser of the gatekeeper directs or steers”*.

The clear intent of requiring such an initial choice screen is to limit leverage from OS, browsers and virtual assistants into browsers, virtual assistants and browsers, and in so doing enhance contestability for the latter. However, a number of issues of interpretation and implementation again arise.

⁶ In particular, Directive 2005/29 of the European Parliament and of the Council of 11 May 2005 concerning unfair business-to-consumer commercial practices in the internal market, OJ [2005] L 149/22, as amended by Directive 2019/2161. On the application of this Directive on dark patterns, see Commission Guidance of 17 December 2021 on the interpretation and application of Directive 2005/29 of the European Parliament and of the Council concerning unfair business-to-consumer commercial practices in the internal market, OJ [2021] C 526/1, section 4.2.7.



(xi) *Timing of initial choice screens*

As discussed above, there are risks associated with asking end users to make too many choices in terms of generating choice fatigue. As such, there is merit in limiting the occasions at which end users are prompted to a manageable number. Reflecting such concerns, Article 6(3)(iii) only imposes an active choice screen at an end users 'first use' of a service.

However, it is not entirely clear what an "*end user's first use*" is. Is it only (i) the first time they use the service in question (such that pre-existing users are not affected), (ii) the first time they do so after the DMA comes into force? or (iii) the first time they use (or install) an OS, browser or virtual assistant on a new device?

There is arguably a trade-off here. Initial choice screens may not be especially popular with users, who primarily want to get on with using their device, and thus may prefer to receive as few choice screens as possible, as rarely as possible.

On the other hand, if the first or second of these options is the right interpretation, then the impact of this provision might be expected to be relatively limited, at least once the DMA is in place, given there are relatively few new end users coming into the market over time, and relatively little switching by existing users between ecosystems.

Given the general focus within the DMA on effectiveness, therefore, **the Article 6(3)(iii) wording "end user's first use" seems most likely to mean that defaults must be chosen anew with every first use (or installation) on a new device. However, it would be useful to have clarification on this point.**

(xii) *Payment for access to initial choice screens*

The DMA is silent on whether gatekeepers can charge third parties for access to – or prominence on – the initial choice screens required under Article 6(3)(iii).

However, any such charging would create new issues. First, there is a serious risk that the gatekeeper's own service would always win any bid for prominence, given that the gatekeeper itself gets to keep the proceeds.⁷ This has been a recognised problem in the context of the remedies to the EU's *Google Shopping* case.⁸ Second, there is a risk that the third parties that are most likely to bid highest are going to be those that offer the worst deal to end users, for example in terms of extracting and using the most data. Again, this would not seem to be a good outcome, or generate the 'right' type of contestability. This risk materialised in the EU *Google Android* case, and indeed Google has now made access to the choice box free for eligible search providers.⁹

Moreover, gatekeepers are strictly required to list "the main available service providers" and moreover Article 13(6) requires that they must not offer "*choices to the end-user in a non-neutral manner*". On the basis of these requirements, **it seems reasonable to conclude that gatekeepers**

⁷As discussed in J. Crémer et al (2022), "The Digital Markets Act: An economic perspective on the final negotiations", VoxEU, <https://cepr.org/voxeu/columns/digital-markets-act-economic-perspective-final-negotiations>.

⁸Commission Decision of 27 June 2017, Case 39 740 *Google Search (Shopping)* which has been upheld by the General Court in Case T-612/17 *Google v. Commission*, EU:T:2021:763.

⁹See: <https://blog.google/around-the-globe/google-europe/changes-android-choice-screen-europe/>



should not charge for access or prominence on the Article 6(3)(iii) choice screens, and certainly (if this not accepted) that any fee should not be set on the basis of an auction. This interpretation also fits with the general DMA focus on effectiveness. It would be useful to have clarification on this point. We note that the DMA is silent on the question of whether the gatekeeper can charge a fair, reasonable and non-discriminatory ongoing fee, or revenue share, to providers who are successful in being chosen.

(xiii) Choice architecture of the initial choice screen

As discussed above, the design of choice screens can be critical to their success. It is useful that Article 13(6) requires that they not be designed in a non-neutral manner. However, to make the choice screen work effectively to promote fairness and contestability, more guidance may be required, not least because it is typically impossible to design choice architecture that is perfectly neutral.

Relevant design questions include:

- How many options should be included? The provision refers to “*the main available service providers*”, but how long should this list be? In general, the list should be **long enough** to provide real choice and promote real contestability, **while not leading to choice overload**. But this still provides substantial leeway;
- What order should options be provided in? It may seem natural to include the most popular option first, but this is unlikely to be the best option for promoting contestability. On the other hand, randomising may give a poor user experience, when they already know what option they want. **Stratified randomising** might potentially strike a reasonable balance (for example, the top 3 services in random order, followed by the next 5 in random order);
- How much description should be provided? Given that end users are likely to exhibit “familiarity bias”, whereby they are more likely to choose familiar options, it could be argued that there would be merit in providing **short descriptions of each option**, alongside each name.
- Should users be reassured that their choice is reversible? Given that end users are likely to be cautious, it would also be valuable to be able to **reassure them that they can easily switch their default back later** if they wish to do so; and
- How should choice screens be varied for virtual assistants? People may react differently to choices that they listen to. For example, they may lose concentration if asked to listen to a long list of options. In principle, the aim should be to strike a balance between usability and contestability. One approach might be to allow **a shorter core list of ‘main available service providers’ to be provided on virtual assistants, but adding one or two of the next tranche of main available providers, to be included on a randomised basis, to preserve contestability.**

The answers to these (and other) questions will be critical to the success of Article 6(3)(iii). However, there are also risks associated with the Commission being too prescriptive in terms of answers.



In our view, **the Commission should therefore set out its high level expectations around the choice architecture of the initial choice screens, and be tough in holding the gatekeepers to account in showing how they are meeting these expectations. In reviewing their submissions, it should seek the input of third parties, draw on the extensive evidence collected by gatekeepers through A/B testing, and potentially require its own testing. The Commission could usefully also set out how it expects gatekeepers to engage with third parties too.**

The Commission should also leave itself leeway to make changes over time, as we learn more about the effectiveness of these provisions in promoting contestability.

(xiv) The risk of harming services with limited market power

The requirement to provide an initial choice screen only applies for gatekeepers that have designated search engines, virtual assistants or web browsers. This restriction is useful in limiting the application to situations where there is a serious contestability issue. Nonetheless, there is a risk that certain browsers and search engines could be designated – based on their user numbers and their strength in a particular segment – despite their having a relatively small position in the sector as a whole.

For such services, **Article 6(3)(iii) could have the unintended consequence of requiring the opening up of some default settings to competition where the current service provider is relatively small, to the potential benefit of their larger rivals.** It is far from clear that this is the DMA's intention, but **it is not entirely clear how it can be avoided under the existing DMA framework. The Commission should be alert to this possible outcome and keep the issue under review.**

cerre Centre on Regulation in Europe



Avenue Louise 475 (box 10)
1050 Brussels, Belgium
+32 2 230 83 60
info@cerre.eu
www.cerre.eu
🐦 @CERRE_ThinkTank
🌐 Centre on Regulation in Europe (CERRE)
📺 CERRE Think Tank