

<p>Title: Impact Assessment - A new pro-competition regime for digital markets IA No: BEIS031(C)-21-CCP RPC Reference No: RPC-DCMS-5078(1) Lead department or agency: Department for Science, Innovation and Technology Other departments or agencies: Department for Business, Energy and Industrial Strategy</p>	Impact Assessment (IA)
	Date: 21/04/2023
	Stage: Final Stage
	Source of intervention: Domestic
	Type of measure: Primary Legislation
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Summary: Intervention and Options	RPC Opinion:

Cost of Preferred (or more likely) Option (in 2019 prices)			
Total Net Present Social Value	Business Net Present Value	Net cost to business per year	Business Impact Target Status
NQ	NQ	NQ	Non-qualifying regulatory provision

What is the problem under consideration? Why is government action or intervention necessary?

Digital markets often share a combination of characteristics that lead to the dominance of one, or a small number of, firm(s). These characteristics include network effects, unequal access to data and the importance of ecosystems. Together these features can act as barriers to entry or expansion in digital markets, preventing new entrants from bringing innovation and choice to the market. Existing pro-competition tools are not well suited to address the barriers to competition posed within these complex, fast-moving digital markets. The proposed regime aims to tackle these issues by addressing both the sources of market power and the harms that result from the exercise of this power. Government intervention is necessary as the concentration of market power and weak contestability in these markets is unlikely to be rebalanced through market forces or existing regulatory tools.

What are the policy objectives of the action or intervention and the intended effects?

The objective is to establish a new regime to promote competition in digital markets for the benefit of consumers. This would be achieved through the dual action of targeting the effects of the exercise of market power, and the underlying sources of this market power (e.g. market characteristics that act as barriers to entry). This would allow for harms to be remedied in the shorter term, and for market power to be effectively rebalanced in the long term. The intended outcome is an improvement in consumer outcomes in digital markets (including lower prices, higher quality, greater choice) and increased growth and innovation in the digital economy.

What policy options have been considered, including any alternatives to regulation? Please justify preferred option (further details in Evidence Base)

The policy options considered within this analysis are as follows:

- **Option 0: Do Nothing (No new action)**- The continuation of the current state of regulation and existing Competition & Markets Authority (CMA) tools.
- **Option 1: A DMU with power to implement conduct requirements for firms with Strategic Market Status (SMS firms)** - This option involves giving the CMA new powers to implement conduct requirements, which will be exercised by an administrative unit within the CMA (the DMU). This body would be able to impose requirements in relation to the behaviour of firms when carrying on a digital activity identified by the [DMU/CMA], where the firm has been found to have, in respect of that digital activity, substantial and entrenched market power and a position of strategic significance.
- **Option 2: A DMU with powers to implement conduct requirements and PCIs for SMS firms**- In addition to the powers outlined in option 1, the CMA would be granted the power to impose pro-competition interventions (PCIs) to tackle the sources of market power on firms with, in respect of a digital activity, substantial and entrenched market power and a position of strategic significance.
- **Option 3: A pro-competition regime with powers to implement conduct requirements, PCIs and merger requirements for SMS firms**- In addition to the powers outlined in option 2, this option would include additional merger requirements for SMS firms to increase transparency.

Potential alternatives to regulation were not deemed to be suitable given the substantial and entrenched market power currently enjoyed by large firms within some important digital markets. It is unlikely that a non-regulatory approach would generate significant changes that would be in line with the overarching policy objectives of promoting competition.

Under all three options, the key monetised costs fall on SMS firms but in all options end, users benefit from the proposed measures.

Our preferred option is Option 3: A pro-competition regime with powers to implement conduct requirements, PCIs and additional merger requirements for SMS firms. This is a regulatory option that would grant new powers in statute to the CMA, to be exercised by staff in its recently formed Digital Markets Unit (DMU), which is an administrative unit of the CMA. The DMU would impose conduct requirements and pro-competition interventions on firms it has designated with Strategic Market Status (SMS), and also manage enforcement of these. SMS firms would also be required to inform the CMA of a subset of their mergers prior to their completion. This option most closely aligns with identified policy objectives and is expected to return the greatest value for money.

The regime is targeted at addressing the market power of a small number of very large firms and will therefore not place any burdens on the majority of firms in digital markets.

Is this measure likely to impact on international trade and investment?		Yes		
Are any of these organisations in scope?	Micro : No	Small : No	Medium: No	Large: Yes
What is the CO ₂ equivalent change in greenhouse gas emissions? (Million tonnes CO ₂ equivalent)		Traded: N/A		Non-traded: N/A

Will the policy be reviewed? Yes. Within 5 years of implementation

I have read the Impact Assessment and I am satisfied that, given the available evidence, it represents a reasonable view of the likely costs, benefits, and impact of the leading options.

Signed by the responsible Minister:



Date:

21/04/2023

Summary: Analysis & Evidence

Policy Option 1

Description: The DMU, with new statutory powers, would be able to enforce conduct requirements for firms it has designated with SMS.

FULL ECONOMIC ASSESSMENT

Price Base Year 2019	PV Base Year 2020	Time Period 10 Years	Net Benefit (Present Value (PV)) (£m)		
			Low: 1,152	High: 4,150	Best Estimate: 2,668

COSTS (£m)	Total Transition (Constant Price) Years	Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low	0.6	32	270
High	0.9	188	1,572
Best Estimate	0.8	100	836

Description and scale of key monetised costs by 'main affected groups'

- Transition costs include familiarisation costs and initial intensive compliance costs associated with the implementation of the pro-competition regime measures. These costs impact SMS firms only.
- There are one-off set up costs associated with the implementation of the regulator and these costs will impact government spending.
- Ongoing costs include regulatory funding costs (ongoing operational costs) and compliance costs. DMU funding costs will be borne by the government, and certain activities will be recouped from SMS firms through a levy, while the compliance costs will impact SMS firms.

Other key non-monetised costs by 'main affected groups'

- This IA does not quantify the general loss of revenue that SMS firms may experience as a result of improvements in competition within digital markets.
- This IA does not undertake an assessment of the full range of potential remedies under the pro-competition regime that may be used to address competition issues. This is due to data availability and because the CMA has not reached any final views as to whether any particular interventions are warranted.

BENEFITS (£m)	Total Transition (Constant Price) Years	Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Low	N/Q	355	2,894

High	N/Q		539	4,420
Best Estimate	N/Q		428	3,504

Description and scale of key monetised benefits by ‘main affected groups’

- The benefits associated with conduct requirements relating to consumer choices around use of data

Other key non-monetised benefits by ‘main affected groups’

- Non-SMS firms: lower costs associated with unfair treatment (e.g. exclusionary behaviour) by SMS firms.
- Consumers (including business and end users of services in digital markets): the wider benefits associated with an improvement in competition (reduced prices; Increased quality; Increased choice; Reduced harm).

Key assumptions/sensitivities/risks rate (%)

Discount

3.5

- Compliance costs associated with the Enterprise Act 2002 phase 2 investigation stage have been used as a proxy for initial compliance costs.
- It is assumed that there will be 4 SMS designations in the first year.
- It has been assumed that only SMS firms will have to familiarise themselves with the new regime and that these costs will not be passed onto consumers.
- The estimated benefits are primarily driven by conduct requirements that improve consumer choices with regard to the use of their data for the purpose of digital advertising.

BUSINESS ASSESSMENT (Option 1)

Direct impact on business (Equivalent Annual) £m:			Score for Business Impact Target (qualifying provisions only) £m:
Costs: 97	Benefits: 0	Net: -97	
			Non-qualifying regulatory provision

Summary: Analysis & Evidence

Policy Option 2

Description: The DMU, with new statutory powers, would be able to enforce conduct requirements, and pro-competition interventions (PCIs) for firms it has designated with SMS.

FULL ECONOMIC ASSESSMENT

Price Base Year 2019	PV Base Year 2020	Time Period 10 Years	Net Benefit (Present Value (PV)) (£m)		
			Low: 3,197	High: 6,906	Best Estimate: 4981

COSTS (£m)	Total Transition (Constant Price) Years		Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low	0.8	1	46	392
High	1.1		207	1,730
Best Estimate	1.0		116	969

Description and scale of key monetised costs by 'main affected groups'

- Transition costs include familiarisation costs.
- Initial intensive compliance costs associated with the implementation of the SMS designation process, conduct requirements and PCIs. These costs impact SMS firms only.
- There are one-off set up costs associated with the implementation of the regulator and these costs will be borne by the government.
- Ongoing costs include regulatory funding costs (ongoing operational costs), compliance costs as well as costs associated with the implementation of PCIs. DMU funding costs will be borne by the government, and at least partly recovered from SMS firms through a levy.

Other key non-monetised costs by 'main affected groups'

- This IA does not quantify the loss of revenue that SMS firms may experience as a result of wider improvements in competition within digital markets.
- This IA does not undertake an assessment of the range of potential remedies under the pro-competition regime that may be used to address the competition issues outlined in the CMA's mobile ecosystems market study¹. This is because the CMA has not reached any final views as to whether any particular interventions will be taken forward under the pro-competition regime.

¹ [CMA mobile ecosystems interim report \(Dec 2021\)](#)

BENEFITS (£m)	Total Transition (Constant Price) Years	Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Low	N/Q	581	4,738
High	N/Q	892	7,297
Best Estimate	N/Q	728	5,950

Description and scale of key monetised benefits by ‘main affected groups’

Under this option, the key benefits that have been quantified are:

- the economic benefits associated with the implementation of a data access PCI;
- the benefits consumers derive from having more control over their data following the implementation of a choice requirement PCI;
- and benefits associated with a conduct requirement relating to consumer choices around use of data for digital advertising. This conduct requirement example is specific to online platforms.

Other key non-monetised benefits by ‘main affected groups’

Non-SMS firms:

- lower costs associated with unfair treatment (e.g. exclusionary behaviour) by SMS firms.

Consumer benefits associated with:

- greater interoperability across online platforms;
- increased consumer choice through the implementation of a choice screen and;
- potential remedies attached to the CMA’s interim mobile ecosystems report.

Beyond the potential monetisation of benefits to consumers there are:

- Positive spillovers to adjacent, dependent sectors.

Key assumptions/sensitivities/risks

3.5

- EA02 cost estimates associated with the phase 2 investigation stages have been used as a proxy for initial compliance costs.
- It is assumed that there will be 4 SMS designations in the first year and each SMS firm will face one PCI investigation per annum.
- The benefits are primarily driven by conduct requirements that improve consumer choices with regard to the use of their data for the purpose of digital advertising.
- It has been assumed that only SMS firms will have to familiarise themselves with the new regime and that these costs will not be passed onto consumers.

Discount rate (%)

BUSINESS ASSESSMENT (Option 2)

Direct impact on business (Equivalent Annual) £m:			Score for Business Impact Target (qualifying provisions only) £m:
Costs: 112	Benefits: 0	Net: -112	
			Non-qualifying regulatory provision

Description: The DMU, with new statutory powers, would be able to enforce conduct requirements and pro-competition interventions for firms it has designated with SMS. Firms with SMS would also be subject to additional transparency requirements for their mergers.

FULL ECONOMIC ASSESSMENT

Price Base Year 2019	PV Base Year 2020	Time Period 10 Years	Net Benefit (Present Value (PV)) (£m)		
			Low: 2,872	High: 7,461	Best Estimate: 5,167

COSTS (£m)	Total Transition (Constant Price) Years	Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low	1.0	49	417
High	1.4	220	1,838
Best Estimate	1.2	121.8	1,022

Description and scale of key monetised costs by ‘main affected groups’

- Transition costs include familiarisation costs.
- Initial intensive compliance costs associated with the designation of SMS, conduct requirements and the implementation of PCIs. These costs only impact SMS firms.
- Ongoing costs include regulatory funding costs (ongoing operational costs), compliance costs (including the costs to comply with the merger transparency requirements) and costs associated with the implementation of PCIs. These costs impact SMS firms.
- In addition, there are one-off set up costs associated with the implementation of the new regime within the CMA and these costs will impact the government.
- DMU funding costs will be borne by the government, and at least partly recovered from SMS firms through a levy, while the compliance costs will impact SMS firms.

However, the true costs and benefits associated with the implementation of this option will depend on the types of interventions taken by the DMU following SMS designation. The DMU will be granted a toolkit of interventions and will implement these in a flexible and targeted manner depending on the market and the actions of SMS firms.

Other key non-monetised costs by ‘main affected groups’

- This IA does not quantify the loss of revenue that SMS firms may experience as a result of wider improvements in competition within digital markets.
- This IA does not undertake an assessment of the range of potential remedies under the pro-competition regime that may be used to address the competition issues outlined in the CMA’s mobile ecosystems market study².

² [CMA mobile ecosystems interim report \(Dec 2021\)](#)

BENEFITS (£m)	Total Transition (Constant Price) Years	Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Low	N/Q	577	4,710
High	N/Q	961	7,878
Best Estimate	N/Q	798	6,188

Description and scale of key monetised benefits by ‘main affected groups’

Under this option, the key benefits that have been quantified are:

- the economic benefits associated with the implementation of a data openness PCI;
- the benefits consumers derive from having more control over their data following the implementation of a choice requirement remedy and benefits associated with a conduct requirement relating to consumer choices around use of data.
- Additional benefits to consumers from additional merger investigations.

Other key non-monetised benefits by ‘main affected groups’

Non-SMS firms:

- lower costs associated with unfair treatment (e.g. exclusionary behaviour) by SMS firms.
- Positive spillovers to adjacent, dependent sectors.

Consumer benefits associated with:

- greater interoperability across online platforms;
- increased consumer choice through the implementation of a choice screen and;
- potential remedies attached to the CMA’s interim mobile ecosystems report.

Key assumptions/sensitivities/risks

3.5

- EA02 cost estimates associated with the phase 2 investigation stages have been used as a proxy for initial compliance costs.
- It is assumed that there will be 4 SMS designations in the first year and each SMS firm will face one PCI investigation per annum.
- The benefits are primarily driven by conduct requirements that improve consumer choices with regard to the use of their data for the purpose of digital advertising.
- Based on the proposed merger reporting thresholds, we assume that on an annual basis there will be between 30 and 40 mergers required to submit a report to the CMA.
- It has been assumed that only SMS firms will have to familiarise themselves with the new regime and that these costs will not be passed onto consumers.

Discount rate (%)

BUSINESS ASSESSMENT (Option 3)

Direct impact on business (Equivalent Annual) £m:			Score for Business Impact Target (qualifying provisions only) £m:
Costs: 118	Benefits: 0	Net: -118	
			Non-qualifying regulatory provision

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Section 1 - Background

1. Digital technologies are the engine driving the UK's economic growth. In 2019, the digital sector³ contributed over £150 billion to the UK economy⁴ and in 2021 accounted for 1.8 million jobs⁵. 2021 saw record levels of investment into UK tech; the £29.4bn raised by UK start-ups and scale-ups in 2021 was double the figure raised in Germany (£14.7billion) and almost three times that raised in France (£9.7 billion)⁶ with more 'unicorn' companies created than ever before. The rate of tech sector GVA contribution to the UK economy has grown by an average of 7% per year since 2016⁷.
2. Beyond their contribution to the economy, digital technologies play an increasingly important role in our everyday lives. They are redefining the way we work, access information and news, and stay in touch with loved ones. The widespread reliance on digital services, further intensified by the Covid-19 pandemic, has demonstrated the substantial benefits they offer. While new technologies are delivering huge value to consumers and businesses, a small number of firms exert immense control across strategically critical services online. Ensuring that digital markets remain dynamic and competitive, so that they continue delivering these benefits, is central to the government's ambition to drive growth and build a world-leading digital sector.
3. However, there is compelling evidence that digital markets⁸ have become increasingly concentrated with the same large, global tech companies. In 2021, the following companies (Meta, Alphabet, Apple, Microsoft and Amazon) each reported more than 20% growth from the year before, cementing their place as providers of essential digital services⁹. While the size and presence of 'big' digital firms is not inherently bad, there is a growing consensus that this concentration of entrenched market power amongst a small number of tech companies is undermining effective competition, restraining growth and innovation, and causing harm to the consumers that rely on them. For example, the International Monetary Fund (IMF) has found that market power in the tech industry increased significantly between 1995 and 2016, including an increase of over 30% in mark-ups (i.e. firms' "prices" over marginal costs) and an increase over 10% in concentration, globally¹⁰. Google's revenue per search is now 30-40% higher than its next competitor for identical search queries¹¹ and Facebook's revenue per user is more than 10 times higher than its competitors¹².
4. Our regulatory system needs to adapt to these new challenges. Existing competition tools are not suited to the specific challenges in digital markets and competition enforcement is backward looking, adversarial, and notoriously slow. The new pro-competition regime will remove the obstacles to competition and drive growth in digital markets. New tools will deliver fast, highly targeted action to make markets more contestable and level the playing field for UK tech firms.
5. The Digital Markets proposals take forward the government's commitment¹³ to establish a new regulatory regime for digital markets. It will address the unique barriers to competition in digital

³ DCMS Sectors Economic Estimates 2018 (2020), p11, defines the 'digital sector' in accordance with the definition developed by the OPCS using the UN Standard Industrial Classifications (SICs). The definition includes a series of sub-sectors that mainly create value through the direct use of digital technologies.

⁴ DCMS, [Sectors Economic Estimates 2019 \(provisional\) Gross Value Added](#), December 2020.

⁵ DCMS, [Sectors Economic Estimates Employment January 2021 to December 2021](#), 2022

⁶ DCMS, [Press release: UK tech sector achieves best year ever as success feeds cities outside London](#), December 2021

⁷ Tech Nation, [The future UK tech built](#), 2021

⁸ The treatment of the definition of digital markets for the purpose of this IA is outlined in paragraphs 12 and 13.

⁹ Statista, [Big tech keeps getting bigger](#), October 2021

¹⁰ IMF, [Rising Corporate Market Power: Emerging Policy Issues](#), March 2021.

For the purposes of this analysis, the IMF define the technology industry as industry ICB = 9 ("Technology") and its subsector ICB = 953 ("Software & Computer Services"). Mark-ups are firms' prices over their marginal costs as estimated by the IMF.

¹¹ CMA analysis of Google and Bing's search prices when comparing like-for-like search terms, [CMA Market Study](#), June 2020

¹² In the UK revenue per user increased from less than £5 in 2011 to over £50 in 2019, CMA, CMA Market Study, June 2020

¹³ DCMS, [A new pro-competition regime for digital markets](#), July 2021

markets, driving productivity, innovation and growth. It will deliver lower prices for UK families, help entrepreneurs compete and grow, and give consumers more choice and control over the services they use online. Central to the new approach will be the Digital Markets Unit¹⁴ (DMU) which was established in non-statutory form within the Competition and Markets Authority (CMA) in April 2021. This administrative unit is forward-looking and will be equipped to act swiftly in response to rapidly-evolving digital markets when the CMA's new digital markets powers come into force. Its core purpose will be to promote competition by addressing both the sources of market power and the economic harms that result from the exercise of market power.

6. The establishment of the DMU was a key strategic recommendation proposed by the Digital Competition Expert Panel in 2019¹⁵. Their report concluded that some digital markets can be prone to 'tipping' in the favour of a small number of companies, and that this can lead to consumer harm. The Furman Review report proposed a new pro-competition regime for these digital markets, and its six strategic recommendations – including to establish a new Digital Markets Unit (DMU) – were accepted by the government in 2020.
7. Since the Furman Review, reports and recommendations from governments, regulators, and experts in the UK and around the world¹⁶ have contributed towards international momentum on the need for action in digital markets. Other jurisdictions globally, including the EU and the US, are now moving quickly to introduce measures to address competition concerns in digital markets. The EU published proposals for a Digital Markets Act in December 2020 and recently (March 2022) has provisionally agreed to the text of that legislation to promote competition among large tech firms. In addition to this, the US has put forward five US bills covering platforms¹⁷. A number of countries have already introduced new legislation to promote competition in digital markets, including Germany, Japan, Australia and the Republic of Korea.
8. Implementing a new pro-competition regime, to be overseen by the newly established DMU, aligns with the government's commitment to design regulation which supports innovation, to help unlock the full potential of digital services and bring benefits to all regions and communities¹⁸. This also complements a wider range of initiatives related to digital markets such as the Online Safety Bill,¹⁹ the Plan for Digital Regulation,²⁰ and the National Data Strategy (including reforms to data protection laws)²¹.
9. In July 2021, the government published a 10-week consultation on their vision for a new pro-competition regime for digital markets that will drive growth and promote innovation. This included the proposals for the process for designating firms with Strategic Market Status (SMS), the objectives and the powers of the Digital Markets Unit, and the approach to the conduct requirements, pro-competition interventions and SMS merger rules. A consultation response was published in May 2022, setting out the finalised proposals for the new regime.
10. This Impact Assessment (IA) provides evidence and analysis to support the government's case for intervention and provides a more detailed qualitative and, where possible, quantitative assessment of impacts of the regime. This builds on the consultation IA²² and takes the consultation responses into consideration (more details can be found under section 5).

¹⁴ Established in non-statutory form in April 2021

¹⁵ HMT, [Unlocking digital competition, Report of the Digital Competition Expert Panel](#), March 2019

¹⁶ For example: CMA, [Online platforms and digital advertising market study](#), July 2019; Digital Markets Taskforce, [Advice of the Digital Markets Taskforce](#), December 2020; EU Commission, [EU Digital Services Act Package](#), December 2020; US House Judiciary Subcommittee on Antitrust, [Investigation of Competition in Digital Markets: Majority Staff Report and Recommendations](#), October 2020; and, [Stigler Committee on Digital Platforms: Final Report](#), September 2019.

¹⁷ The most relevant regulatory bills are: The American Choice and Innovation Online Act of 2021; The Augmenting Compatibility and Competition by Enabling Service Switching Act of 2021; and The Ending Platform Monopolies Act of 2021.

¹⁸ HM Treasury, [Build Back Better: our plan for growth](#), March 2021.

¹⁹ Department for Digital, Culture, Media & Sport and Home Office, [Online Harms White Paper](#), April 2019.

²⁰ Department for Digital, Culture, Media & Sport, [Digital Regulation: Driving growth and unlocking innovation](#), (updated June 2022)

²¹ Department for Digital, Culture, Media & Sport, [National Data Strategy](#), (updated December 2020).

²² DCMS, [A new pro-competition regime for digital markets](#), consultation Impact Assessment, July 2021

Section 2 - The Case for change

Problem under consideration and rationale for intervention

11. In this IA, the term 'digital markets' describes markets that display a unique combination of characteristics that make them prone to 'tipping' (see 'Market characteristics' section below), and where firms use information and communication technologies to facilitate interactions between multiple users (often, but not exclusively, on opposite sides of the market), such as search engines and social media.²³ As discussed in the following sections, markets with these characteristics tend towards concentration, and the existing competition regime is not best placed to deal with the subsequent competition impacts. The definition for digital markets set out here is not widely agreed upon, and its use within this IA is not intended to cut across the appropriate scope and regulatory perimeter of the DMU. Firms will be designated if they have Strategic Market Status (SMS) in respect of a particular digital activity.
12. There are three key drivers of weak competition leading to suboptimal outcomes for consumers²⁴ in some digital markets:
 - i. **Market characteristics** - The unique combination of fundamental market characteristics inhibits the ability of potential rivals to enter and/or grow, thereby undermining effective competition (see table 1 below for a list of these characteristics). Hence these markets, such as digital markets, tend to 'tip' towards one, or a few, extremely powerful firms.²⁵
 - ii. **Firms' anti-competitive behaviour** - These powerful firms have the ability, and sometimes the incentives, to exploit their market power by engaging in anti-competitive behaviour, often to the detriment of consumers.
 - iii. **Ineffective regulation** - The existing 'ex-post' regulatory system can be slow and backward-looking, and so is not optimal for fast-moving digital markets. Even once harm has been identified, traditional competition remedies are not always effective at remedying harm or preventing/deterring future offences.

These three 'theories of harm' (which are addressed in turn in the following subsections) suggest these markets tend towards concentration, giving rise to poor consumer outcomes, and that neither the free market (i.e. self-correction), nor regulators with their existing competition tools, will effectively rectify these issues. Change is therefore needed to correct underlying market failures, remedy harms, and unlock the benefits of open and dynamic competition in digital markets.

Market characteristics

13. Table 1 below outlines that some digital markets have a unique combination of specific structural features that distinguish them from other markets.

²³ 'Consumers' in digital markets can sometimes be used to collectively refer to both business users and end users (i.e. households), since both can be consumers of multi-sided digital platforms. For this reason, in IA differentiates 'business users' from 'end users/consumers' where relevant.

²⁴ See footnote 22 on defining consumers in digital platform markets.

²⁵ Katz and Shapiro, (1994), [Systems Competition and Network](#) effect, Journal of Economic perspective. These authors define "tipping" as "the tendency of one system to pull away from its rivals in popularity once it has gained an initial 'edge'". In some digital markets, even if the incumbents do not engage in any "strategic" behaviour, there is a tendency to grow and gain a persistent market power (M. Motta, 2019).

Table 1: Characteristics of digital markets

Characteristics	Description	Explanation / Impact
Network effects (direct and indirect)	Value of a service to each user increases as the total user base increases	<p>Some digital markets exhibit network effects, where users get more value from the service as the total number of service users grows.</p> <p>Direct network effects: The value to users on the same side of the market increases as the number of users on that side increases (E.g. social media platforms, such as Facebook, are more valuable to individuals when more of their friends are also using them).</p> <p>Indirect (or ‘cross-side’) network effects: The value of the service to users on one side of the market increases as a new user on a different side joins the network (E.g. the value to retailers of selling on an e-commerce platform, such as Amazon, increases as more end users use the platform).</p> <p>These effects reduce the incentive for business users and end users (collectively ‘consumers’) to switch to rival platforms, or ‘multi-home’ with several smaller platforms, making new entry challenging and hence reducing market contestability.</p>
The use and importance of data	Data is essential to the business models of digital markets. They collect, store and use (monetise) user data	<p>Services in digital markets are often free at the point of consumption for end users. However, rather than pay monetary costs, users pay to access a service with their data (‘data costs’) which is then monetised by firms. The collection of data by firms allows them to personalise user experiences and target their product offering (e.g. advertising), increasing the value of the service to both business and end users. This allows a feedback loop to form, where the largest incumbents use their ever-increasing access to data (which can be described as ‘data monopolies’²⁶) to further entrench their advantage over rivals who do not have the same access.</p>
Economies of scale	Average costs decrease with size due to low/zero marginal costs	<p>With high fixed set-up costs and low marginal operational costs, large firms benefit from economies of scale. This gives a natural market power to incumbent firms and can act as a barrier to entry/expansion for potential entrants.</p>
Economies of scope	Average costs decrease as firms increase the variety of goods and services supplied	<p>Due to the transferable nature of the valuable technology and data digital firms use, they can often easily operate across several markets. By diversifying their offering in this way, firms can benefit from economies of scope that new entrants in any one market cannot immediately rival.</p>
Ecosystems / Vertical Integration	Ecosystem: A network of complementary products or services spanning different markets	<p>Some firms have built large ‘ecosystems’ of integrated complementary products and services around their core service. These products and services are designed to interoperate with one another such that users are kept on their network.</p>

²⁶ [Power to the People: Independent report on competition policy](#) (‘The Penrose Review’). February 2021.

	Vertical integration: the presence of one firm at multiple stages of the supply chain in which it operates	In some cases, these ecosystems can span different stages of the supply chain as large digital firms become vertically integrated (e.g. an e-commerce platform that sells its own retail products on its platform). This can give rise to conflicts of interest and the potential for these firms to leverage their power in one activity, to undermine competition in other stages of the chain. The interaction of these features with economies of scope also strengthens a firm's prevailing market power.
Global reach	Although the nature of markets may differ slightly across countries, digital markets are not subject to geographical constraints	The nature of digital markets means they are not constrained by physical location and can be used simultaneously by consumers all around the world (globally non-rivalrous). This allows firms to gain large, global customer bases. This characteristic amplifies economies of scale, data collection, and network effects.
Consumer decision making and power of defaults	End users make decisions quickly, and they have immediate impacts. Default positions are powerful due to 'default bias' and 'status quo bias'.	Digital markets are increasingly fast-moving, and decisions at the click of a button have immediate impact. End users have also developed a reduced tolerance for delay leading to 'default behaviour' (a propensity to accept whichever default option is presented to save time), and are prone to 'status quo bias' (a preference for remaining with the existing option even where this is not the rational choice). For example, end users may be more likely to accept the default search engine on a new computer they have purchased. This reduces the likelihood of users switching to new/rival firms' services, even where they might offer better value.
Information asymmetries	Firms collect significant amounts of information on users, leading to asymmetries they can leverage	Firms collect significant amounts of personal data from end users, which they monetise. Users are often unaware of how much data they are giving away and how it is being used. If users had knowledge of the magnitude of their 'data cost', and its value to firms, they might demand a better return in exchange or else switch to rival services.

14. Many of the features detailed in table 1 are not necessarily undesirable in their own right. For example, economies of scale provide a beneficial cost efficiency, and ecosystems can offer a seamless digital experience for consumers. However, they can act as barriers to entry/expansion and undermine effective competition. As a result of their cumulative effect, the 'winner takes most/all' market dynamic is accentuated. As such, some digital markets, such as digital platform markets, are prone to 'tipping' quickly in the favour of one, or a small number of, extremely powerful firms.²⁷
15. This 'tipping', and the subsequent lack of market contestability²⁸, can give rise to harm and undesirable outcomes for consumers and society in two key ways:

²⁷ See for example, Unlocking Digital Competition: Report of the Digital Competition Expert Panel ('The Furman Review'), 2019. Or Digital Markets Taskforce, [Advice of the Digital Markets Taskforce](#), December 2020.

²⁸ Contestability refers to the threat of challenge by new entrants. In theory, incumbents can feel competitive pressures even where existing competition *in* the market is relatively weak, providing potential competition *for* the market, or contestability, is sufficient.

- i. Once the market has tipped, and ‘winners’ (incumbent firms to whom the market has tipped) are shielded by the barriers to entry/expansion, they can behave somewhat independently of competitive pressures. This freedom to act with little threat of losing market share to rivals or new entrants can be described as ‘market power’.²⁹ Market power is not inherently bad, and can sometimes be the deserved reward for ‘winning’ a market on merit (e.g. through investing in R&D to develop a superior product). However, excessive and entrenched market power is an indicator of market failure, particularly when the market power results from anti-competitive behaviour, is incontestable by new entrants, and is exploited to the detriment of other market participants (e.g. consumers).
- ii. New entrants are unable to overcome the ‘incumbency advantage’ that barriers to entry provide, even when their offering could lead to an improvement in consumer or societal outcomes. For example, a start-up with a high-quality, innovative service and more efficient (lower unit cost) operations might still struggle to compete with a data-rich incumbent boasting a vast user network across its self-preferencing ecosystem of services.

Incumbents’ anti-competitive behaviour

16. Large incumbents in some digital markets face limited competition and benefit from substantial market power. When these firms exert their market power in the pursuit of supernormal profit, it often results in suboptimal outcomes for consumers, the economy, and our society.
17. There is an increasing body of evidence, both in the UK and internationally, that some of the largest tech companies are exploiting their market power in a way that is causing persistent material harm to their business and end users, and to our society. Evidence of some of these harms (e.g. reduced quality, higher prices, reduced choice, and reduced innovation) is outlined in the ‘Evidence of harm’ section below.
18. This exploitation of market power can often include the use of anti-competitive practices. Most commonly, though not exclusively, these practises can be categorised as either:
 - **Exclusionary behaviour** - conduct by a firm with the intention of preventing competitors from entering, growing, or remaining active in a market.
 - **Exploitative behaviour** - conduct by a firm to extract additional rents at the expense of other market agents - typically consumers - who are reliant on it. Unlike exclusionary abuses which harm consumers indirectly by reducing competitive offerings in the market, exploitative abuses directly harm consumers.
19. Some types and examples of exclusionary behaviours include:
 - **Price Parity Agreements** - powerful platforms can take advantage of their critical position in the market (for example, as the main distributor to their vast user network) and make use of price parity agreements. Agreements of this type create a level playing field, ensuring the powerful platform is protected from price competition. This lowers the incentives for suppliers and competing platforms to lower their prices, and can potentially reduce horizontal competition.

Case Study: Amazon e-books - Most Favoured Nation clauses

The European Commission investigated potentially anti-competitive ‘Most Favoured Nation’ (MFN) clauses in contracts between Amazon and e-book suppliers in the European Economic Area. Through these clauses, Amazon required suppliers to inform it of any more

²⁹ Market power is typically measured in relation to the prices ‘powerful’ firms are able to charge. In the context of digital services that are often free at the point of consumption, this price-related definition of market power is more difficult. However, the ability to freely alter non-price characteristics, often to the detriment of consumers, are considered as similarly indicative of market power in this context.

favourable terms they were offering to other retailers, and to also make these available to Amazon. The case was settled with commitments.

Source: *European Commission, 'CASE AT.40153 E-book MFNs and related matters (Amazon)'*³⁰

- **Self-preferencing** - with their market power often including strategic control over routes to market, firms can preferentially supply other divisions of their own corporate group. This is common where firms are also active in related adjacent markets, and have built ecosystems. In these instances, the firm can leverage their position in one market to provide access advantages to its own products in the adjacent markets and foreclose competitors.

Case Study: Google Search - Comparison shopping

The European Commission investigated Google's use of its Google Search platform to direct users to its own comparison-shopping service over those of competitors. The outcome of this investigation was a fine of €2.42 billion to Google for abusing its market dominance in Search.

Source: European Commission Press Release: Commission fines Google €2.42 billion. June 2017.³¹

- **Refusal to deal** - at its extreme, self-preferencing can result in a 'refusal to deal', where firms refuse to supply downstream rivals with key inputs, or upstream rivals with key distribution to market. For example, large firms benefit from large networks of existing users. By constraining the interoperability of smaller, nascent platforms with their own, these large firms limit access to their wide user base. As they are deprived of consumers and visibility in the market, this makes it harder for smaller firms and new entrants to compete.

Case Study: Facebook, Vine and APIs

In 2013 Twitter acquired video sharing platform, Vine. Prior to the acquisition, Vine users were able to find friends they already knew on Facebook through its 'Find Contacts' feature. However, following Vine's acquisition by Twitter, Facebook removed Vine's access to this API. In doing so, Facebook was able to degrade users' experience of Vine and reduce the platform's competitive threat. Vine was discontinued by Twitter in 2016.

Source: *CMA Market Study (p.141)*

20. Exploitative behaviour is often framed in the context of monopolists charging 'excessive' or 'unfair' prices to its consumers who have few alternatives to which they can switch consumption. In many digital markets, where end users enjoy a service that is free at the point of consumption, this phenomenon is less obvious. However, business users are still prone to exploitative pricing, and firms can and do exploit end users through various non-price aspects.
21. Some examples of types of exploitative behaviour in digital markets include:
 - **Degrading quality of service** - End users of digital markets typically 'pay' for the service with their attention and data. Increasing the number of adverts served to users relative to organic content, whilst maintaining the same price ('data cost'), degrades the service's price/quality ratio. Decreasing the quality of a constantly-priced service could be argued as exploitative.

³⁰ European Commission, [CASE AT.40153 E-book MFNs and related matters \(Amazon\)](#). May 2017.

³¹ European Commission Press Release: [Commission fines Google €2.42 billion for abusing dominance as search engine by giving illegal advantage to own comparison shopping service](#), June 2017.

- **High prices for business users** - Business users (e.g. advertisers and third-party retailers) typically have to pay to use digital platforms. Therefore, they can be subjected to exploitative prices, and will often pass higher prices through to their own consumers.
- **Discriminating between customers** - Firms can use data to uniquely tailor the experience of each consumer, meaning they are more able to offer differing prices or services. This can sometimes be deemed an exploitative practice as certain consumers, or consumers in certain circumstances, will inevitably be faced with a 'worse' service or higher price. For example, social media platforms can tailor ad load by user, such that end users assessed to have a higher tolerance for advertising are shown more adverts.

22. Firms can also learn and exploit the behavioural biases of end users:

- End users are prone to behavioural biases that can be exploited by firms. They can use choice architecture (i.e. different ways in which choices can be presented) to nudge users towards outcomes that benefit themselves but may not necessarily be in the user's own best interest. For example, users are prone to 'default bias' and 'status quo bias', meaning they are less likely to switch away from the default search engine on an internet browser.³² This means dominant cross-market firms could leverage their high market share in the browser market to direct traffic to their own search engine. Such behaviour by firms can potentially distort competition by acting as a barrier to entry and expansion for potential search engines wishing to compete with the dominant cross-market firm's search engine offering. End users could potentially miss out on alternate service offerings that use innovative business models.
- Firms' ability to influence user decision-making through choice architecture is amplified by the asymmetry in information between the two parties. Large firms collect and hold a lot of information about users, but users are far less informed regarding their interaction with firms and how their data is used. For example, a survey undertaken by Which? into Facebook users' awareness of targeted advertising revealed that only a fifth (18%) of respondents reported awareness of online tracking and customer lists³³

Ineffective regulation in digital markets

23. Existing regulatory tools are not well suited to quickly identifying and remedying competition concerns in digital markets. 'Ex-post' enforcement, which refers to intervention following a finding of abuse of market power or an adverse effect on competition (AEC), can mean a long-time lag between anti-competitive harm first being identified and it being addressed. As a result, consumers can often experience prolonged, irreversible harms.
24. As it stands, the CMA has powers to monitor and intervene in markets through its market's regime, including to impose a wide range of structural and behavioural remedies. This differs from the proposed regime, which includes ex-ante regulation. For instance, the conduct requirements (which fall under the preferred policy option) seek to manage the harmful effects of substantial and entrenched market power, by setting out how firms with SMS are expected to behave, and thus protecting end users and businesses.
25. The dynamic nature of digital markets has changed, and those firms which once competed to gain a share in their markets are in many cases now the largest and most powerful global firms. There is a growing body of evidence that the lack of competition in activities by digital firms is often the result of specific market features (listed above) that lead to entrenched market power.³⁴ Utilising ex-ante regulation will, by setting expectations in advance, mitigate the consumer harm that stems from a lack of effective competition.

³² CMA, [Online platforms and digital advertising market study Appendix H: default positions in search](#), July 2019.

³³ Which? [Value of the Choice Requirement Remedy](#), 2021

³⁴ CMA, [Advice of the Digital Markets Taskforce](#), 2020

Case Study: U.S. v Microsoft

In 1996, the US Department of Justice received a complaint about Microsoft regarding its internet browser, Internet Explorer, in relation to Microsoft leveraging its monopoly power over operating systems into the browser market. The main antitrust complaint was not officially filed until 1998 and then took more than four years to finally conclude all court procedures. During this entire period from 1996 to 2002, Microsoft's share of the browser market rose from less than 20% to above 90%. Although Microsoft's market share declined again after the conclusion of the case, this did not help Microsoft's initial competitors, such as Netscape which lost most of its market share between 1996 and 2002.

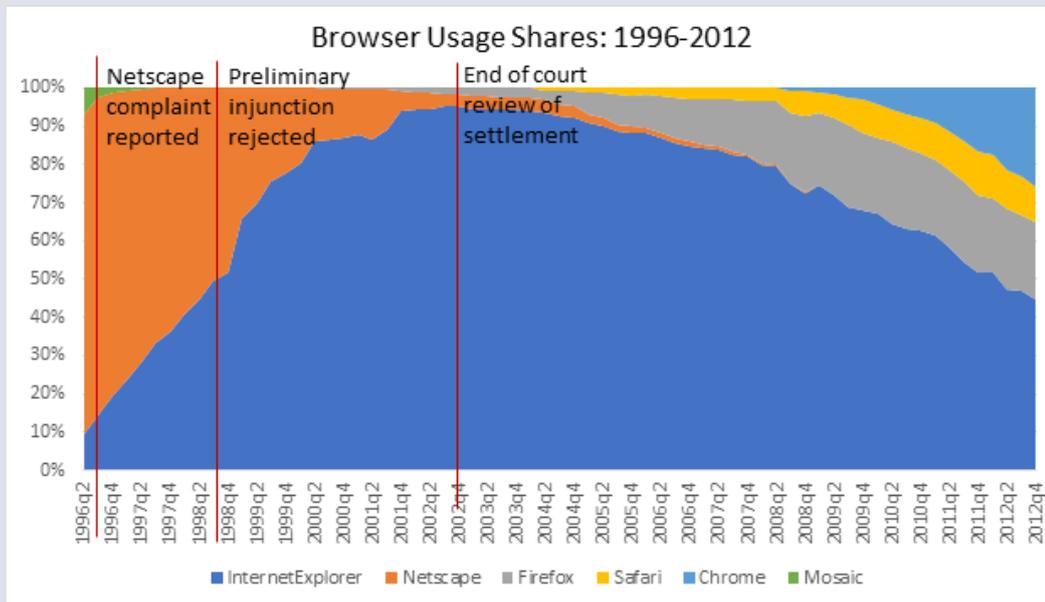


Chart source: Ennis calculations based on data from EWS Web Servers at UIUC, WebSide Story, The Counter and StatOwl.

Source: Sean Ennis, 'U.S. v Microsoft: Where did the time go?' CCP Working Paper 21-05, UEA. (2021)³⁵

26. For instance, the CMA has powers to monitor and intervene in markets through its market's regime, including to impose a wide range of structural and behavioural remedies. Since these tools were not designed with fast-moving digital markets in mind, they are not currently well equipped to deal with the unique challenges these complex markets pose. For example, the prevalence of digital ecosystems that span multiple adjacent markets can often require intervention with a focus that is wider than a single market. Equally, markets prone to quickly tipping and rapid technological change may require a more proactive and dynamic approach to regulation that cannot be achieved through static studies and one-off interventions.
27. It can also be difficult for regulators to effectively assess and prove breaches of competition law in digital platform markets given their novel and rapidly evolving nature, and the opaque business models of large platforms.
28. Even once harm and a breach of competition law have been established, traditional regulatory remedies are not always effective at remedying harm or preventing future repeat offences. There exists limited robust, systematic evidence of the effectiveness of fines and other remedies as a deterrent in digital markets. There is also a risk that powerful firms may see regulation as something to mitigate against, rather than as a set of rules promoting 'fair' behaviour or deterring 'harmful' behaviour.

³⁵ Ennis, S. (2021). ["U.S. v. Microsoft: Where did the time go?"](#) CCP Working Paper 21-05, UEA.

Case Study: E.U. v Google Search

The European Commission case against Google Search was opened 9 years after the harm first took place and took a further 3 years to conclude. The largest fine imposed by the Commission to date was approximately £3.9bn on Google in 2018 - equating to just 4% of Alphabet's (Google's parent company) 2018 revenue. As allegations of anti-competitive practises persist, particularly in other jurisdictions,³⁶ It is possible that previous sanctions have not proved effective deterrents.

Sources: *European Commission (2018)*³⁷

CMA analysis of Alphabet 10-K forms 2018, CMA Market Study Appendix D (2019)

29. Once markets tip, and by the time breaches of competition law have been proved, it is difficult for competition to be rebalanced with existing regulatory tools. Therefore, ex-post regulation is akin to 'shutting the stable door after the horse has bolted',³⁸ and is unlikely to impact the market power already well-established by some incumbents.

The impact of mergers and acquisitions on digital markets

30. Large digital firms take part in a number of mergers annually. Between January 2016 and December 2020, the MAAMA firms together purchased close to 300 companies.³⁹ However, only 2% (7) of these transactions were investigated, either by the CMA or the European Commission.⁴⁰
31. It is now argued that some of these mergers may have had unforeseen long-term impacts on competition⁴¹. The effects of which on competition can be difficult to evaluate but are widely considered to be contributing to the entrenched market position of the largest digital firms.⁴² For example, it is now suggested that the acquisition of Instagram by Facebook in 2012 may have deprived the social media market of the positive effects of two separate services competing over time.^{43 44}
32. Through mergers, the powerful digital firms can further entrench their dominant market positions, raise barriers to entry and expansion, and expand their digital ecosystems by creating a 'moat' around their core services.
33. Mergers and acquisitions can drive positive outcomes where knowledge/resource sharing and other synergies yield efficiencies and innovations. However, it has been proposed that some acquisitions of smaller companies may have been deliberate 'killer', or 'reverse killer',

³⁶ U.S. Department of Justice, [Justice Department Sues Monopolist Google For Violating Antitrust Laws](#), October 2020.

³⁷ Antitrust: [Commission fines Google €4.34 billion for illegal practises regarding Android mobile devices to strengthen dominance of Google search engine](#) (2018).

³⁸ Andreas Mundt, President of the Bundeskartellamt. [Statement on the Amendment of the German Act against Restraints of Competition](#): "In future we will be able to prohibit big tech companies from engaging in certain types of conduct much earlier and, so to speak, shut the stable door before the horse has bolted", January 2021.

³⁹ BEIS analysis of MergerMarket data. 296 completed transactions during this period.

⁴⁰ Prior to 1 January 2021, the European Commission would have had exclusive jurisdiction over certain cases instead of the CMA. The cases included in the count are: Microsoft/LinkedIn, Apple/Shazam, Microsoft/Github, Amazon/Deliveroo, Google/Looker, Google/Fitbit, and Facebook/GIPHY. Since this period Facebook/Kustomer, Microsoft/Zenimax and Microsoft/Nuance Communications have been investigated.

⁴¹ More recent examples also include: Facebook/Giphy; Microsoft/LinkedIn; and Google/Fitbit.

⁴² Retrospective analysis of the impacts of a merger are hard to quantify as it is difficult to establish a baseline impact of what would have occurred in the absence of the M&A activity. This evidence would be essential in order to understand the specific marginal impacts of a merger with a large digital firm.

⁴³ US House Judiciary Subcommittee on Antitrust, [Investigation of Competition in Digital Markets: Majority Staff Report and Recommendations](#), October 2020.

⁴⁴ Though this transaction was cleared at the time, competition authorities have since developed their understanding and review processes for digital acquisitions.

acquisitions aimed at neutralising competitive threats before they could grow, or at reducing innovative efforts in markets.^{45 46}

34. Although it can be difficult to prove that ‘killer acquisitions’ occur and are under-enforced, US authorities are currently investigating the actions of large digital ‘MAAMA’ firms in relation to previous mergers, including Facebook’s (now known as Meta) acquisition of Instagram and WhatsApp.^{47 48}
35. As well as directly discontinuing innovative projects, ‘killer’ and ‘reverse-killer’ acquisitions can distort the incentives for new entry and innovation. This is because innovators and their investors understand that the biggest payoff is through creating something that complements the status quo, that is then bought-out by a large firm (known as ‘entry for buyout’), rather than by seeking to disrupt or replace incumbents. Some investors in the US have indicated that they avoid funding entrepreneurs or companies that compete directly or indirectly with dominant firms in the digital economy.⁴⁹ These dynamics may not result in the optimal form of investment or innovation to maximise consumer welfare.⁵⁰

Case Study: Google/Waze price increase following acquisition

In 2013 Google purchased mapping service Waze. Since completing the Waze acquisition, Google has reportedly come to capture 81% of the market for navigation mapping services. For years, Google offered a free tier of its Maps API, incentivising developers to build their apps with Google Maps. In 2018, however, Google Maps introduced a single “pay-as-you-go” pricing plan for the core mapping APIs, which dramatically reduced the number of free Maps API calls a firm could make. Developers stated that the change amounted to a price increase of 1,400%.

Sources: *US House Judiciary Subcommittee report, p.239 (2020).*

36. There may historically have been underenforcement against merger and acquisition activity in digital markets. This is important as merger control allows for ex-ante intervention and the prevention of harm before it arises. As mentioned above, ex-post regulation can only be used once harm (e.g. higher concentration, lesser competition) or anti-competitive behaviours have been proved and after firms have already established dominant positions, meaning markets are not working well for consumers and society.
37. The Furman Review and the CMA’s Digital Markets Taskforce raised concerns about the scale and type of acquisitions made by the large digital firms.⁵¹ A few past mergers in particular have since been suggested to have had a negative effect on competition in the UK (e.g. Google/DoubleClick and Facebook/Giphy),⁵² with a review by consultancy LEAR finding that competition authorities in the past have ignored important theories of harm in transactions

⁴⁵ ‘Killer acquisitions’ describe acquisitions, typically by larger firms of smaller firms, done with the intention to discontinue the target’s innovative projects and pre-empt future competition.

‘Reverse killer acquisitions’ describe acquisitions, with the intention of adopting the target firm’s innovations. These are considered detrimental to competition as the acquirer ‘kills’ its own organic innovation in favour of absorbing a developed technology, depriving consumers of potential future competition between two innovative services.

⁴⁶ Deller, Doan, Mariuzzo, [Competition and innovation in digital markets](#), p.24. 2021. Report by University of East Anglia Centre for Competition Policy on behalf of BEIS. 2021.

⁴⁷ Documents presented in Congressional hearing, and discussed in this Wired article: [The Facebook and Amazon Documents That Captivated the Hearing](#). July 2020.

⁴⁸ US House Judiciary Subcommittee on Antitrust, [Investigation of Competition in Digital Markets: Majority Staff Report and Recommendations](#), pp 150-160, 164-165. October 2020.

⁴⁹ US House Judiciary Subcommittee on Antitrust, [Investigation of Competition in Digital Markets: Majority Staff Report and Recommendations](#), October 2020.

⁵⁰ Deller, Doan, Mariuzzo, [Competition and innovation in digital markets](#), p.24. 2021. Report by University of East Anglia Centre for Competition Policy on behalf of BEIS. Published alongside consultation and Impact Assessment.

⁵¹ A new pro-competition regime for digital markets – Advice of the Digital Markets Taskforce (CMA135), December 2020 (the [Taskforce Advice](#)). Details of the SMS merger regime proposals are set out in [Appendix F](#). Unlocking Digital Competition – Report of the Digital Competition Expert Panel, March 2019 (the [Furman Review](#)).

⁵² [CMA Market Study](#), p 20. July 2020; [The CMA directs Facebook to sell Giphy](#)

involving digital markets (including the Facebook/Instagram and Google/Waze transactions).⁵³

38. In recent years, the CMA has been more active in opening investigations into large digital firm MAAMA mergers and pursuing forward-looking theories of harm (e.g. Google's acquisition of Looker and Facebook's acquisition of GIPHY). This demonstrates growing understanding amongst regulators that merger activity by the most powerful digital firms should be more closely scrutinised. Internationally, there have also been significant policy proposals to reform merger control, including of large digital firms.⁵⁴
39. Despite the recent increase in scrutiny by the CMA of mergers involving large digital firms, there are certain limitations to the current merger system, designed in a pre-digital age, that may affect the CMA's ability to review and intervene effectively in potentially harmful mergers.

An overview of the current merger system:

- The UK merger regime is based on voluntary notification⁵⁵ and features two jurisdictional tests. Broadly, these may be met when two businesses 'cease to be distinct' and either i) the target business has UK turnover of over £70 million, or ii) the acquirer and the target supply or procure 25% or more of a certain type of goods or services in the UK and there is an increment to this 'share of supply'.⁵⁶
- The CMA's merger process has two phases – the first being a shorter review to assess whether the merger has a 'realistic prospect' of resulting in a substantial lessening of competition (SLC), and the second being a longer, in-depth review to assess whether the merger results in an SLC on the balance of probabilities (i.e. more likely than not). At the end of the second phase, the CMA has the power to block a merger or to require remedies if it believes the merger raises competition concerns. The CMA may also accept remedies in lieu of referring a case to an in-depth review if suitable solutions are offered by the merging parties.

Limitations of the current merger regime for assessing mergers involving large digital firms

40. There are practical limitations of the CMA's lack of awareness of large digital firm transactions. Any merger may currently be completed without notification as the UK regime is voluntary. The CMA is often unaware of the mergers that are undertaken by large digital firms until after they have completed. This reduces the effectiveness of the UK's merger review process as the CMA is not able to consider whether the transactions would warrant investigation to safeguard consumers. For large digital firm mergers this can be problematic given their influence across the wider digital ecosystem.
41. For digital mergers the commercial value of the target often lies in its key staff, IP or data. This could be relatively easily transferred to the acquirer at the point of completion, which means that the CMA is likely to review after integration has already taken place. Integration can occur extremely quickly in digital markets and can be almost impossible to unwind (e.g. when the target is no longer a viable standalone business because staff, data and contracts have been transferred) which limits the effectiveness of the potential remedial actions available to the CMA. The harm to consumers could have already taken place. Reviewing mergers following their completion is likely to also result in increased burdens on both the CMA and the merging parties, particularly if these need to be unwound.

⁵³ LEAR consulting, via Stigler Center, [Competition in Digital Markets: A Review of Expert Reports](#), October 2020.

⁵⁴ There is a substantial overhaul of US merger control proposed by Senator Klobuchar in the Antitrust Law Enforcement Reform Act 2021. Senator Hawley has recently introduced a different bill that would ban all mergers by firms with a market value greater than \$100 billion, a measure that would effectively block the five largest US digital firms from making any acquisitions. ([Reuters article](#), 13 April 2021). Similarly, the European Commission has recently indicated a tougher stance on digital mergers including introducing reporting requirements for gatekeeper firms, and wider use of the Article 22 referral mechanism.

⁵⁵ Although the CMA has the discretion to 'call in' mergers for investigations if these are not voluntarily notified to it.

⁵⁶ The merger must also be within the time limit for review, namely that in the event of a completed acquisition, the CMA must make a reference decision within four months following the transaction being made public or the CMA being informed of it.

Evidence of harm

42. Market power in many digital markets is concentrated amongst a few firms:
- Google generated over 90% of UK search advertising revenues, and Facebook generated over 50% of UK display advertising revenues, in 2019.⁵⁷
 - Approximately one third of all UK e-commerce transactions went through Amazon in 2019.⁵⁸ The Furman Review suggests it is likely that Amazon is dominant in a meaningfully distinct sector of online retail - particularly for relatively low-value and/or homogenous products.⁵⁹
 - All smartphones ran either Google or Apple operating systems in 2020⁶⁰ (Apple 52%, Google 48%) and 99% of smartphones worldwide run either Google or Apple operating systems.⁶¹ The CMA Mobile ecosystems market study interim report suggests that as a result Apple and Google are able to make a number of key decisions that can have significant implications for the products and services that are accessed online.
 - Over 95% of native app downloads through mobile app stores in the UK in 2020 were made via the App Store or the Play Store⁶². Apple and Google are in a position to determine which apps are allowed in their store, how apps are ranked and discovered, and also often charge significant levels of commission (up to 30%) on app developers' revenues from in-app transactions, by requiring these transactions to be made through their own in-app payment systems.
43. As outlined above, market power is not inherently bad. For example, a firm's high market share may be indicative of more efficient operations, a novel business model, or innovations that are popular with consumers. However, evidence suggests the exploitation of substantial, entrenched, and relatively incontestable market power by these firms *has* led to material harms for consumers. The following evidence on poor outcomes that have been observed in digital platform markets is drawn from several sources, including the CMA's market studies into digital advertising and mobile ecosystems, international reports into app stores, and a survey of UK retailers that use third party ecommerce platforms.
44. **Reduced quality:**
- In digital advertising markets, end users are exposed to an increasing volume of adverts at the expense of organic content. The number of Ad impressions per hour on Facebook rose from 40-50 in 2016 to 50-60 in 2019, which represents a 22% increase. Over the same period, ad impressions per hour increased 200% on Instagram.⁶³
 - In the app store market, app developers claim that the user experience is worsened by both Apple and Google's interoperability restrictions and mandatory in-app purchase systems. For example, Match Group indicated they are unable to offer customer support services, or smooth payment, subscription, and refund processes.⁶⁴
45. **Higher prices:**
- The prices charged by firms with market power for digital advertising are significantly higher than those of their competitors. For example, Google's revenue per search is 30-40% higher than Bing for identical search queries.⁶⁵ Even when controlling for the perceived higher quality of advertising, analysis of price-bid ratios still finds that Google extracts 10-30% more surplus from advertisers than Bing.⁶⁶ It is likely that increased advertising costs

⁵⁷ CMA, [Online platforms and digital advertising market study](#), July 2019.

⁵⁸ Edge by Ascential report, via [UK Tech News](#). December 2019.

⁵⁹ [The Furman Review](#), p 30. March 2019

⁶⁰ [CMA mobile ecosystems interim report \(Dec 2021\)](#)

⁶¹ Dutch Authority for Consumers and Markets (ACM), '[Market Study into Mobile App Stores](#)', April 2019.

⁶² [CMA mobile ecosystems interim report \(Dec 2021\)](#)

⁶³ CMA, [Online platforms and digital advertising market study](#), p 313. July 2019.

⁶⁴ [Match Group response to Digital Market's Taskforce call for information](#). 2020.

⁶⁵ CMA, [Online platforms and digital advertising market study](#), pp 313-314. July 2019.

⁶⁶ CMA, [Online platforms and digital advertising market study Appendix Q](#), p Q24. July 2019.

are passed through to households in the form of higher prices in sectors that make heavy use of digital advertising (e.g. hotels, travel, consumer electronics, insurance).⁶⁷

- Apple and Google charge some app developers up to 30% commission for in-app purchases. This has been described as “excessive” relative to the 1-5% typically charged for payment processing services (e.g. 2.9% by PayPal). These fees are typically passed on to end users. For example, a monthly Spotify Premium subscription for EU users is €9.99 on Spotify’s website, but €12.99 on the Apple App Store.⁶⁸ The EU Commission has sent Apple a Statement of Objections in relation to how its App Store rules have distorted competition in the music streaming market.⁶⁹
- Apple is likely to be charging above a competitive price for its mobile devices – a cost that is borne directly by consumers. In 2017 66% of iOS devices were sold for more than £500, compared to just 19% of Android devices. By 2020, this gap had expanded, with 81% of iOS devices being sold for more than £500, compared to just 20% of Android devices⁷⁰

46. **Lack of control over, and poor return for, data collection:**

- The CMA market study detailed how end users receive ad-funded services such as search and social media for free in exchange for their attention and data, which firms monetise, resulting in a trade-off between data privacy and access to a service. In a more competitive market, firms might compete for user data by offering improved quality (e.g. a better service with fewer ads), better privacy terms (e.g. requiring less data or giving users greater control over data collected), or even negative prices (e.g. rewarding users for their data and attention).⁷¹

47. **Reduced innovation:**

- In its market study into digital advertising, the CMA suggests that Google and Facebook are insulated from competitive threats, leaving them with reduced incentives to innovate both in their core and adjacent services. They also present evidence that both firms prevent new entry and expansion by potential disruptors by constraining interoperability and acquiring nascent firms. As a result, these markets suffer from reduced innovation, meaning less choice for consumers in the long-term.
- Evidence from the US House Judiciary Subcommittee and Dutch Authority for Consumers and Markets (ACM) market study suggests that both Apple and Google's in-app purchase systems and self-preferencing deter entry into the app market and stifle competing developers, depriving end users of potential new, innovative apps.^{72 73}

Case Study: Google and Apple revenue-sharing agreements

In October 2020, the US Department of Justice filed an antitrust lawsuit against Google, targeting its revenue sharing agreements with companies like Apple in exchange for default search positions on its devices. Since the lawsuit, Apple has announced the development of its own rival search engine. This suggests the payments to Apple, estimated at \$8-12bn annually, had previously been restraining competition and innovation.

⁶⁷ CMA find 100% pass-through to be a reasonable assumption as:

1. digital advertising is a variable cost for advertisers, and
2. empirical research suggests pass through is generally 100% in markets with many competitors, which describes many markets reliant on digital advertising.

See: [‘Cost pass-through: theory, measurement and potential policy implications, a report prepared for the Office of Fair Trading’](#), RBB Economics, February 2014

⁶⁸ Dutch Authority for Consumers and Markets (ACM), [‘Market Study into Mobile App Stores’](#), April 2019.

⁶⁹ European Commission, [Antitrust: Commission sends Statement of Objections to Apple on App Store rules for music streaming providers](#), April 2021.

⁷⁰ CMA, [Mobile ecosystems market study interim report](#), p77, December 2021

⁷¹ CMA, [Online platforms and digital advertising market study](#), p8, July 2019.

⁷² US House Judiciary Subcommittee on Antitrust, [Investigation of Competition in Digital Markets: Majority Staff Report and Recommendations](#), p99, October 2020.

⁷³ Dutch Authority for Consumers and Markets (ACM), [‘Market Study into Mobile App Stores’](#), p104, April 2019.

Sources: US Department of Justice (October 2020)⁷⁴

Financial Times, 'Apple develops alternative to Google search' (October 2020)⁷⁵

48. **Poor terms for business users:**

- Amazon's terms, fees and treatment of third-party sellers have been described as "bullying tactics" in the US House Judiciary Subcommittee report. Similar negative experiences were reported in a survey of UK retailers who sell on third-party e-commerce platforms. Respondents that used Amazon marketplace were more likely than users of other platforms to experience issues with restrictions on communication or resolving disputes (53%), and suspension or removal of products/accounts (51%). 73% of businesses disagreed that they can influence or amend the terms and conditions on Amazon.⁷⁶
- Business users of e-commerce platforms often must endure harms due to a lack of viable alternatives or high switching costs. Around one third of respondents to the survey disagreed that if the terms and conditions on their main platform are changed to the detriment of their company, they can easily switch to a different online platform.⁷⁷
- Amazon has also been accused of abusing its dual role as a marketplace, and a retailer on the marketplace, to avoid the normal risks of retail competition. The European Commission found that Amazon uses non-public business data of third-party sellers to calibrate its own retail offers and business decisions.⁷⁸ While it could be argued this constitutes Amazon injecting healthy competition into the relevant product markets, the fees it charges third-party sellers simultaneously drives a wedge between their and Amazon's prices. This reduces the likelihood third-party sellers will be able to compete.

Case Study: Amazon Books

Using Amazon's online fees calculator, UCL's Institute for Innovation and Public Purpose finds the platform takes 22% of third-party book sellers' revenue as fees. This does not include VAT charges, service fees, or the monthly £25 'Professional Seller' subscription fee without which sellers are not eligible for crucial 'Buy Box' status (it is estimated that 82% of sales go through the Buy Box). Clearly, even a third-party seller that would otherwise be able to compete on price with Amazon's own retail offerings, would now have to contend with an additional 22% in costs.

Sources: UCL IIPP 'Theorising and Mapping Modern Economic Rents' (2020).

The Booksellers Association response to Taskforce Call for Information (2020)

Section 3 - Policy objectives

49. The entrenched market power among a small number of tech companies - driven by the characteristics of digital markets, anti-competitive behaviour and ineffective regulation - undermines effective competition in digital markets.
50. Through a new ex-ante regulatory regime for digital markets and by establishing the DMU as a new administrative unit within the CMA, the government is seeking to address the market failures that lead to suboptimal outcomes for consumers and hold back growth and innovation in the economy.

⁷⁴ United States Department of Justice, [Justice Department sues monopolist Google for violating antitrust laws: Google Complaint](#), October 2020.

⁷⁵ Financial Times, [Apple develops alternative to Google Search](#). October 2020.

⁷⁶ IFF Research, [Retailers' Experience of Using Digital Platforms Survey](#) conducted on behalf of BEIS. 2021.

⁷⁷ Ibid.

⁷⁸ [EU Commission Statement of Objections to Amazon](#), November 2020.

51. The objectives of this government intervention are to:

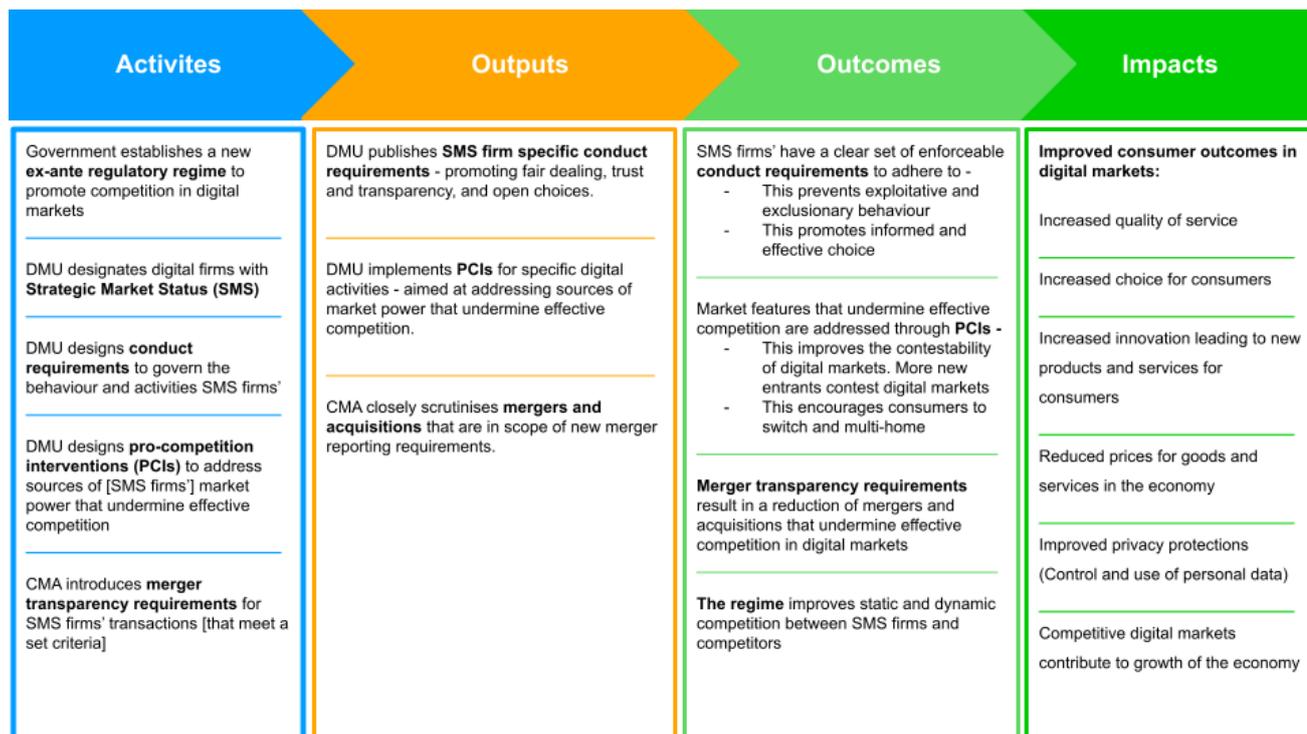
Boost competition in digital markets - achieved by addressing both the sources of market power, and the economic harms that result from the exercise of this power. This will deliver improved consumer outcomes such as:

- Increased quality - Improved quality of services/features in digital markets leading to increased consumer satisfaction
- Increased choice for consumers - Increase in the number and variety of services/features available to consumers - empowering consumers to exercise effective choice
- Increased innovation - For example: Increases in R&D expenditure by incumbent firms, increased rate of change in product offerings in digital markets, greater number of successful and disruptive new entrants, and the potential for the creation and expansion of adjacent markets
- Lower prices - Reduced prices for goods and services across the economy
- Improved privacy protections - Ability of consumers to manage and better control the use of personal data

Drive growth across the economy - achieved by unlocking the benefits of dynamic competitive digital markets.

52. Figure 1 'Pro-competition regime logic model illustrates at a high level the mechanisms through which the regulatory regime is expected to deliver its intended outcomes. The success of this intervention will be measured by monitoring and evaluating the regime's impacts and comparing against those outlined in Figure 1. The table below also presents some potential indicators of success⁷⁹.

Figure 1: Pro-competition regime logic model



⁷⁹ The impacts presented in Figure 1 and indicators in the table of potential indicators are non-exhaustive and will be finalised when the government presents its monitoring and evaluation plan for this intervention (see Section 10 Monitoring and Evaluation).

Table 2: Potential Indicators of Success

Metrics/Indicators	Data Sources (Non-Exhaustive)	Link to Objective/Impacts
Improvements in conduct of SMS firms when dealing with consumers and businesses	<ul style="list-style-type: none"> Regulator information gathering powers 	<ul style="list-style-type: none"> Lower prices Increased choice for consumers Increased quality
Improvements in competition indicators of affected markets (switching/multi-homing rates; number of firms; rates of firm entry and exits, evolution of market shares)	<ul style="list-style-type: none"> Regulator information gathering powers 	<ul style="list-style-type: none"> Lower prices Greater choice Higher quality Increased innovation
Improvements in innovation inputs (i.e. R&D expenditure) and innovation outputs (i.e. number of patents and number of new products) of affected markets	<ul style="list-style-type: none"> Regulator information gathering powers 	<ul style="list-style-type: none"> Greater choice Higher quality Increased innovation
Increases in number and variety of services/features available to consumers of affected markets	<ul style="list-style-type: none"> Regulator information gathering powers 	<ul style="list-style-type: none"> Lower prices Greater choice Increased innovation

Section 4 - Policy options considered

Components of options

53. The regulatory options considered within this analysis vary in terms of the powers granted to the regulator (i.e. components included in the regime). Table 2 shows how each option varies in scope (i.e. from only focusing on conduct requirements to the inclusion of a merger regime and PCIs).
54. Details of the proposed components that may comprise the pro-competition regime are listed below. How many and which of these are included varies by policy option. How the DMU implements these tools, and the specific details of its regulatory interventions, would vary on a case-by-case basis in response to the specific firm, market, and circumstances.
55. **Strategic Market Status (SMS) designation:** SMS designation is a mechanism to ensure that the new regime is appropriately targeted at a small number of digital firms that have, in respect of a digital activity, substantial and entrenched market power and a position of strategic significance, and so targeted where the risk of harm is greatest. For a firm to be regulated under the regime, and therefore subject to conduct requirements and/or Pro-Competition Interventions (PCIs), the DMU would be required to assess whether it meets a set of criteria that qualify it as having 'Strategic Market Status' in respect of a digital activity (or multiple digital activities) identified by the DMU, resulting in formal designation as an SMS

firm. The DMU would only be able to designate firms that have turnover above a certain threshold and where the relevant activity has a sufficient connection with the UK⁸⁰. It would also need to assess in respect of the relevant activity, whether the firm has substantial and entrenched market power⁸¹ and a position of strategic significance.⁸² Rather than setting quantitative thresholds to be used as proxies for establishing a certain level of power, the DMU would be responsible for formally assessing if a firm meets these criteria using a range of qualitative and quantitative evidence. See the Digital Markets, Competition and Consumer Bill for further details on the proposed SMS designation process.

56. **Conduct requirements (CRs):** These would be tailored and enforceable conduct requirements which govern the behaviour and activities of SMS firms. The design and enforcement of the conduct requirements would be undertaken by the DMU. The conduct requirements would fall within specified categories and seek to promote three overarching objectives set out in legislation: fair dealing, open choices, and trust and transparency. These objectives provide the framework (outer limit) that the conduct requirements can address. The aim of the conduct requirements would be to manage the harmful effects of substantial and entrenched market power by setting out how firms with SMS are expected to behave, and thus preventing negative outcomes before they happen, protecting users and businesses. For example, conduct requirements could prevent practices such as unfair leveraging of market power, exploitation of consumers, exclusionary behaviour towards competitors, and restriction of consumer choice. SMS firms can be investigated for suspected breaches of conduct requirements, and if found to be non-compliant, they could be subject to enforcement orders that seek to bring conduct back in line with requirements.
57. Similarly, if there is a threat of significant harm during the investigation process, or a need to prevent action which might reduce the effectiveness of other steps the CMA may take to address the suspected breach or to protect the public interest, interim enforcement orders could be temporarily imposed to enforce conduct changes. See the Digital Markets, Competition and Consumer Bill for further detail on the proposed categories of conduct requirements.
58. As part of its conduct requirement enforcement toolkit, the DMU will be empowered to resolve payment disputes, where there has been a breach of conduct requirements for 'fair and reasonable terms', via the Final Offer Mechanism (FOM) as a last resort. FOM is a dispute resolution procedure that limits an arbitrator to choosing the 'final offer' made by one of the two parties. Please see Annex C for a detailed illustration of FOM.
59. **Pro-Competition Interventions (PCIs):** These would be specific behavioural and structural measures imposed on SMS firms in respect of the relevant digital activity. PCIs are designed to tackle the sources of SMS firms' market power in a designated digital activity. If the DMU suspects that features of the market are causing a competition problem (known as an adverse effect on competition (AEC)) related to the market power of an SMS firm in a designated digital activity, it can choose to launch a PCI investigation. Following this, if an AEC has been identified through its investigations, the DMU may issue binding PCI order(s).
60. PCIs would complement conduct requirements by addressing fundamental features of digital markets (see table 1), that can act as barriers to entry and expansion, and lead to markets 'tipping', thus encouraging longer-term changes to the structure of digital markets and the conditions for dynamic competition. For instance, PCIs may aim to facilitate compatibility between digital platforms, customer switching and to ensure consumers are given choice and control over the collection and use of their data.

⁸⁰ (i) UK turnover of >£1 billion or global turnover of >£25 billion (subject to ministerial sign off).

⁸¹ 'Entrenched' means market power is persistent, durable and unlikely to change in the foreseeable future.

⁸² A strategic position is one where the effects of the firm's market power are likely to be particularly widespread or significant. For example, the firm may be a crucial access point for customers.

61. By making digital markets more contestable with PCIs, competitive pressures should naturally drive the market towards reduced harm and better consumer outcomes (e.g. lower prices, higher quality, greater innovation, and more consumer choice). If, following a PCI investigation, the DMU concludes that an AEC exists, it would impose a targeted and proportionate PCI measure. Examples of the types of interventions include data-related interventions (e.g. personal data mobility, mandated data access), interoperability, consumer choice and default interventions, and certain separation remedies (e.g. data or operational separation). See the Digital Markets, Competition and Consumer Bill for further detail on PCIs and the proposed PCI process (including PCI investigations).
62. **Merger proposals:** Merger transparency requirements for firms designated as having SMS. These include submitting a report⁸³ (before completion), to the CMA, for all acquisitions which meet all of the following criteria:
- i. the value of the holding is at least £25 million; and
 - ii. 15% or more of equity/voting share is acquired by the SMS firm, or owned after the transaction (subsequent transactions which bring acquisitions above the 25% and 50% equity/voting share levels will trigger further reports); and
 - iii. the acquired firm has a specific link to the UK.

Options considered

At the consultation IA stage, a range of options were considered that have not been carried forward. This included: self-regulation by firms within digital markets; as well as a pro-competition regime for all firms in digital markets. The potential alternatives to regulation considered (i.e. self-regulation) were not deemed to be suitable given the substantial market power currently enjoyed by large firms within digital markets. It is unlikely that self-regulation would generate significant changes that would be in line with the overarching policy objectives of promoting competition. Furthermore, the inclusion of all firms within digital markets was deemed as disproportionate. The table below highlights the options which are currently still being considered.

Table 3: Options and their components

Options	Scope	Conduct requirements	PCIs	Mergers
<p>Do nothing (counterfactual)</p> <p>The counterfactual assumes the continuation of the regulation currently in place (such as CMA market studies and investigations)</p>				
<p>Option 1 - A DMU with power to implement conduct requirements</p>	SMS firms only	✓		

⁸³ Note that a merger cannot be completed until the report has been accepted and a waiting period of 5 working days has expired.

Option 2 A DMU with power to implement conduct requirements and PCIs	SMS firms only	✓	✓	
Option 3 A DMU with power to implement conduct requirements, PCIs, and the merger proposals	SMS firms only	✓	✓	✓

Option 0: Do Nothing (No new action) counterfactual

63. This option is the baseline against which the expected impacts of other options are assessed.

64. The counterfactual assumes the continuation of the regulation currently in place: the enforcement of existing competition law, similar use of existing CMA regulatory tools (including market studies and market investigations), and the recent changes to the platform for business regulation.⁸⁴

- The CMA currently has the powers to introduce remedies after a market investigation where it has found an adverse effect on competition. This is the same test (and same range of possible remedies) as in the pro-competition intervention (PCI) tool for the new digital regime proposed under the favoured option, but the tools for how the CMA identifies, designs, enforces and monitors these remedies differ from the proposed regime. The primary benefit of PCIs will be giving the CMA the ability to address competition concerns more quickly and to iteratively adjust the implementation of competition remedies in SMS firms. This will give the CMA the flexibility to start with lighter touch measures and then to review their effectiveness and amend them as necessary in order to ensure ongoing proportionality and effectiveness. Under the counterfactual, where remedies are one-off as in the existing markets regime, there is greater incentive to implement tougher interventions in the first instance as remedies cannot be ‘layered’, as the existing tools are not designed for swift reviews and amendments. Furthermore, PCIs can be implemented at greater speed than the CMA’s current regulatory tools allow as PCI investigations are targeted in scope and therefore warrant shorter investigatory deadlines.
- However, under the counterfactual the CMA will not have the ability to set expectations for the behaviour of SMS firms through conduct requirements in order to limit consumer harms (i.e. it can only impose market investigation remedies *after* an adverse effect on competition has been found, unlike conduct requirements which will impose up-front rules).

65. The counterfactual also takes into account the non-statutory DMU. The government has committed to funding the DMU as an administrative unit within the CMA, from April 2021 up until 2024⁸⁵, to build on the work of the CMA’s digital markets Taskforce⁸⁶ and, where appropriate, use the CMA’s existing powers to investigate harm to competition in digital markets. The CMA and by extension the non-statutory DMU will not have any new powers

⁸⁴ [The Online Intermediation Services for Business Users \(Enforcement\) Regulations](#), 2020

⁸⁵ The level of funding up until the steady state is tied to the stage of legislation.

⁸⁶ A new pro-competition regime for digital markets – Advice of the Digital Markets Taskforce (CMA135), December 2020 (the [Taskforce Advice](#)). Details of the SMS merger regime proposals are set out in [Appendix F](#). Unlocking Digital Competition – Report of the Digital Competition Expert Panel, March 2019 (the [Furman Review](#)).

until the functions and objectives of the regime are finalised in statute. The role of this unit is to:

- Carry out preparatory work to implement the statutory regime.
 - Support and advise the government on establishing the statutory regime.
 - Gather evidence on digital markets.
 - Engage stakeholders across industry, academia, other regulators, and government.
66. **Pros:** The non-statutory DMU is already up and running. This would not require any further action from the government, other than ongoing engagement. The work of the non-statutory DMU would help further understanding of issues within and across digital markets to support any future policy development.
67. **Cons:** Without the interventions put forward under the proposed regime, it is unlikely that the issues currently observed within and across digital markets will be addressed effectively. Consequently, consumers will likely continue to experience persistent harms. In addition, Government has previously committed to respond to the evidence of concentration and harms in digital markets⁸⁷.
68. **Risks:** If the government were to choose the Do Nothing (no new action) option in response to the identified issues outlined above, there is potential for competition to worsen over time, as the affected markets are prone to tipping and may potentially become even more concentrated. In addition, given previous announcements that the Government intends to regulate, doing nothing may result in reputational effects. Overall, a non-regulatory approach is not appropriate as the concentration of market power and weak contestability in these markets is unlikely to be rebalanced through market forces or existing regulatory tools.

Option 1: A DMU with power to implement conduct requirements

69. In this option, the DMU, with new statutory powers, would be able to impose and enforce conduct requirements for firms it has designated with SMS. The conduct requirements seek to manage the harmful effects of substantial and entrenched market power, by setting out how SMS firms are expected to behave, and thus protecting end users and businesses.
70. **Pros:** The DMU would have the ability to set upfront rules and expectations for the behaviour of SMS firms in order to limit the potential harms caused by substantial and entrenched market power. The conduct requirements would be enforceable, meaning that this option will have a material impact on behaviour, and subsequent harm.
71. **Cons:** The introduction of CRs will pose additional compliance costs, implementation costs as well as familiarisation costs for SMS firms.
72. **Risks:** There is a risk that significant competition issues remain. This is because, whilst CRs will likely be effective in limiting the harms that result from market power, this option will not address the fundamental market characteristics that inhibit the ability of potential rivals to enter and/or grow.

Option 2: A DMU with powers to implement conduct requirements and PCIs

73. In this option, in addition to the proposed powers in Option 1, the DMU would be able to impose Pro-Competition Interventions on SMS firms to address the sources of market power and open markets up to greater entry and competition.
74. **Pros:** This option will allow the DMU to address short term consumer harms, whilst also targeting the sources of market power more effectively (i.e. through measures which have

⁸⁷ CMA, [Online platforms and digital advertising market study](#), 2019

been trialled and iterated in a way that is not currently possible) in an effort to rebalance markets in the long term, which is in line with the proposed policy objectives.

75. **Cons:** The introduction of CRs and PCIs will pose additional compliance costs, implementation costs as well as familiarisation costs for SMS firms.
76. **Risks:** The success of this option is dependent on the DMU's use of its PCI powers (e.g. which PCIs it chooses to implement, how they are implemented, and their subsequent efficacy).

Option 3: A pro-competition regime with powers to implement conduct requirements, PCIs and additional merger requirements (preferred option)

77. In addition to the proposed powers in Option 2, this option also includes merger and acquisition transparency measures for SMS firms. This will require SMS firms to make the CMA aware of acquisitions in a sufficient time. This will give the CMA the opportunity to undertake appropriate and efficient merger assessments. This will enable the CMA to order preventative measures at an earlier stage, maintaining a more complete range of potential remedial options if the merger is found to have a detrimental impact on competition. This will reduce the occurrence of mergers with anti-competitive outcomes, improving the options available to consumers and reducing potential consumer harm.
78. **Pros:** In addition to the impacts outlined in option 2, this option will help to further reduce potential anti-competitive behaviour through greater awareness of the potential impacts that SMS firms' mergers and acquisitions may have on consumers. The merger measures will enable the CMA to be aware of mergers of potential competition concern from SMS firms. The CMA will subsequently undertake appropriate levels of scrutiny to these cases to help assess and intervene to protect consumers from anti-competitive mergers within digital markets. Greater awareness of merger activity will allow the CMA to identify potentially harmful transactions, resulting in reduced harm to consumers, relative to the counterfactual.
79. **Cons:** The introduction of CRs and PCIs will pose additional compliance costs, implementation costs as well as familiarisation costs for SMS firms. In addition, requiring SMS firms to inform the CMA of their transactions, if the relevant thresholds are met, will result in additional administrative burdens to the SMS designated firms. Through these requirements there may be limited delays in transaction timelines. However, these costs are expected to be small relative to the potential benefits of the regime (see the Indicative Cost-Benefit Analysis section for more detail).
80. **Risks:** There is a small potential risk that the inclusion of these merger requirements for SMS firms could deter M&A activity that might have a pro-competitive or pro-innovation effect, however we think this unlikely to manifest. These proposals will improve the visibility of certain mergers, however will not change the criteria or process that the CMA currently uses to evaluate mergers - making it unlikely to materially affect broader decisions that the firm makes in M&A decisions. Other jurisdictions such as the US currently require mandatory reporting of all mergers, in comparison to which, our proposals are more limited and proportionate.

Section 5 - Consultation response

81. In July 2021, Government published the consultation [A new pro-competition regime for digital markets](#). The consultation sought views on the proposed design of a new pro-competition regime for digital markets and on the consultation IA. To this end, respondents were asked to complete two surveys:
 - the consultation response survey; and

- the Impact Assessment response survey.
82. The consultation ran from 20 July to 1 October 2021. During this period, 107 written submissions were received during the consultation process, including 3 regarding the Impact Assessment. The range of responses have been carefully analysed and used to inform final policy positions.
83. In summary, the vast majority of respondents supported the overall purpose of the regime and the main principles of its design. Many provided evidence of the need for urgent action and the need to equip the DMU with the ability to rapidly and flexibly respond to the fast-moving issues in digital markets. However, most stakeholders agreed that the scope of the regime should be limited to digital activities and that the assessment of Strategic Market Status should focus on particular activities rather than all of a firm's activities. With this in mind, policy option 5 (in which all firms in digital markets are under scope) from the consultation stage IA has been dropped.
84. As mentioned above, there were only 3 responses to the IA consultation survey, which means that the feedback and evidence received is limited. That said, this IA makes use of the evidence provided. For instance, Which? highlighted the potential value of the Choice Requirement Remedy⁸⁸, and this analysis has been used in support of our assessment of the potential benefits that may result from this regime. For more information on the methodology behind this remedy please see the consumer control over data section under section [8D](#).
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Section 6 - Summary of the preferred option and implementation plan

85. **The preferred policy option is Option 3: A pro-competition regime with powers to implement conduct requirements, PCIs and additional merger reporting requirements for SMS firms only**
86. Under this option, the DMU would be granted powers to impose and enforce conduct requirements on firms it has designated with Strategic Market Status (SMS). The conduct requirements will manage the effects of an SMS firm's market power in a designated activity, anticipating and preventing practices which exploit businesses and consumers, or exclude innovative competitors (i.e. exploitative or exclusionary practices). In addition, the DMU would have the power to implement pro-competition interventions (PCIs), which would be used to target the sources of market power in digital markets (e.g. barriers to entry), reduce the incumbency advantage of SMS firms, and increase competition in and for the market. This option would also require SMS firms to report mergers (i.e that meet a certain threshold) to the CMA, which will put the CMA in a better position to monitor and intervene in the merger activity of SMS firms.
87. The scope of this regulatory regime would be SMS firms, and the DMU would use the SMS designation process to capture only the firms with, in respect of a digital activity, substantial and entrenched market power and a position of strategic significance. The process will target the regime at those digital markets prone to 'tipping'. This is expected to return greater benefits to consumers without disproportionately creating a burden on smaller digital firms.

⁸⁸ Which?, [Value of the Choice Requirement Remedy](#), 2021

88. The government intends to implement this via primary legislation. A non-statutory Digital Markets Unit has been operational since April 2021, and will undertake transitional functions until statutory functions are made available via primary legislation.
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Section 7 - Pro-Competition exemption test

89. All options considered in this impact assessment (both the primary legislation and subsequent regulator activity) are intended to deliver – or to replicate – better competition-based outcomes in markets characterised by market power and are therefore exempt from the business impact target (BIT) under administrative exclusion D, further details can be found in Annex C.
90. This IA is one of three IAs supporting a wider Digital Markets Competition and Consumer (DMCC) bill. Alongside this IA, there will be further IAs produced by the Department for Business and Trade and an overarching IA which will consider the impacts of all parts together. At this stage, the application of the pro-competition exemption applies only to the measures within this IA. If - when considered together - the measures are determined not to meet the competition criteria, this measure will be reclassified as qualifying against the BIT and this will be set out in the overarching IA.
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Section 8 - Indicative Cost-Benefit Analysis

91. This section provides details of the following:
- The **analytical approach** taken to assess the shortlisted policy interventions
 - The **assumptions** used as part of this analysis, and justifications for those assumptions. For a complete list of the assumptions used throughout the impact assessment see [Annex A for a full list of assumptions](#)
 - The **outputs of modelling of the benefits and costs** that would result from the shortlisted policy interventions.

Summary of Inductive Cost-Benefit Analysis

Table 4: Summary of Indicative Cost-Benefit Analysis: 10 Year Net Present Value - 2019 prices, 2020 present value

Shortlisted policy option	Low (£m)	Central (£m)	High (£m)
Option 1 (Conduct requirements only)	1,152	2,668	4,150
Option 2 (Conduct requirements + PCIs)	3,008	4,981	6,906

Option 3 (Conduct requirements + PCIs + Mergers)	2,872	5,167	7,461
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Table 5: Overview of the direct impacts associated with the preferred policy option (**Option 3**) across cost scenarios (over the 10-year appraisal period) - undiscounted, 2022 prices (£, millions)

	High cost, Low benefit (£m)	Central Estimate (£m)	Low Cost, High benefit (£m)
Direct Costs to SMS Firms			
Compliance costs (intensive initiation process)	95	95	95
Ongoing compliance costs	364	145	42
Familiarisation costs	2	2	1
Conduct requirements	2,089	1,045	209
PCIs	14	14	14
Levy (SMS firms)	259	259	245
Direct Benefits to Consumers			
Conduct requirements	4,277	5,490	6,911
PCIs	3,168	3,846	4,524
Merger regime	0	289	660

Notes: All costs in the above table are direct and fall on SMS firms. In contrast, the direct benefits outlined above fall on consumers. More information on estimating the costs and benefits in this table can be found under the relevant sections. It is also worth noting that conduct requirement costs are primarily driven by the loss of revenue that platforms may experience due to the implementation of a conduct requirement relating to 'self-preferencing' behaviour.

Table 6: Business impact target calculations associated with the preferred policy option (**Option 3**) across cost scenarios - undiscounted, 2022 prices (£, millions)

	High cost, Low benefit (£m)	Central Estimate (£m)	Low Cost, High benefit (£m)
Direct costs to businesses			
Compliance costs (intensive initiation process)	95	95	95
Ongoing compliance costs	217	89	34
Merger requirements compliance costs	147	56	8
Familiarisation costs	2	2	1
Conduct requirements	2,089	1,045	209
PCIs	14	14	14
Levy (SMS firms)	259	259	245
Direct Benefits to businesses			
Quantified benefits to businesses	-	-	-
Net Impact (2023 prices)			
Total net direct cost across appraisal period	£-2,909	£-1,606	£-624

92. The tables above outline the expected costs and benefits that have been quantified through this analysis. When reviewing these estimates, it is also important to consider the potential impacts that have not been quantified at this stage. As outlined below, significant uncertainties around the implementation of measures through this regime has meant that it has not been possible to quantify all of the expected impacts, including a number of the expected benefits of the conduct requirements as well as the wider benefits associated with an improvement in competition. Therefore, in line with the RPC guidance and RPC case histories this IA has

followed a scenario 2 approach⁸⁹. At this stage, we have provided an indicative estimate of the likely scale of impacts and will work with the regulator (CMA/ DMU) to produce and submit a Business Impact Target (BIT) assessment following implementation to ensure the potential impacts are captured.

Analytical approach and assumptions

93. The cost benefit analysis of the shortlisted policy options has been conducted in line with guidance from HMT Green Book. As such, a discount rate of 3.5% has been applied to future costs and benefits to account for the time preference of money. Inflation has been accounted for using HMT GDP Deflators and the base year for the analysis is 2022. This has then been input into the BIT calculator. Subsequently, the overall figures above are presented in 2019 prices and 2020 present value⁹⁰. However, the individual costs and benefits throughout this section are presented undiscounted, in 2022 prices.
94. The government has sought to conduct analysis on the likely impacts of shortlisted options using the best available evidence, with sensitivity analysis being used to quantify key impacts subject to unavoidable uncertainty. However, the true costs and benefits associated with the implementation of the preferred policy option (option 3) will depend on the types of interventions taken by the DMU following SMS designation. The DMU will be granted a toolkit of interventions and will implement these in a flexible and targeted manner depending on the market and the actions of SMS firms. The primary legislation will confer upon the DMU powers to create and enforce tailored conduct requirements for each SMS firm. The policy intention is for a list of categories of conduct requirements to be set out in primary legislation with a power for the Secretary of State to update, amend or repeal that list by regulations. This provides clarity to SMS firms and users as the categories of conduct requirements are clearly set out, but also offers the necessary flexibility enabling the requirements to respond and adapt to future changes in digital markets. Amendment of the categories of conduct requirement via an amending power could impact the behaviour of SMS firms in future, but the exact manner in which this would occur cannot be anticipated at this point in time.
95. The primary legislation will also confer upon the DMU powers to implement pro-competition interventions (PCIs) following a targeted, evidence-based investigation into the designated activity in which the SMS firm is operating. The PCIs will be tailored with respect to the relevant digital activity to address the competition problem identified. Each PCI will vary depending on the specific circumstances. In summary, at this stage the potential impacts cannot be estimated with a significant degree of accuracy. This is because the types of interventions will be designed by the DMU following the implementation of legislation.
96. In addition, SMS firms will be required to comply with additional merger requirements which will inform the CMA of a subset of their transactions, prior to their completion. Historical merger data and impact/intervention analysis from the existing merger process has been relied on to provide indicative estimates for the merger proposals. It is unclear whether the historic M&A trends will continue or whether the average impacts from the wider merger regime can be relied on as truly reflective of the digital cases.
97. Therefore, in line with RPC guidance, the department at this stage has sought to provide an indicative view of the likely scale of impacts of the whole policy and will work with the DMU to

⁸⁹ Scenario 2 is where the government provides an indication of the likely scale of impacts but is unable to provide a robust assessment of direct costs to business for validation until the secondary legislation stage or subsequent regulator assessments. This applies where, for example, substantive policy decisions will not be taken until the later stage and/or uncertainty over the impacts of a proposal is too great to provide a meaningful assessment of direct costs to business for verification at the primary legislation stage - https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/827907/RPC_case_histories_-_Primary_legislation_August_2019.pdf

⁹⁰ HMG, [Impact Assessment Calculator: User Guide](#)

produce and submit a Business Impact Target (BIT) assessment following implementation to ensure the potential impacts are captured.

Response to the Consultation Impact Assessment

98. In the consultation stage Impact Assessment, published in July 2021, Government outlined some indicative estimates of cost, and requested that stakeholders provide any evidence they may have that would further the evidence base, and inform the assumptions used throughout this analysis. Evidence was requested to help further assumptions in a number of areas, including compliance costs, impacts on innovation, identification of benefits, and the potential impacts on small and micro businesses.
99. The response from stakeholders was limited. These responses contained, in large part, thoughts on the regime, and how its impacts had been assessed through the analysis, including identifying parties they believed would be impacted significantly and recommendations that certain additional costs may need to be considered. However, recommendations for furthering any quantitative assumptions were limited.
100. The Government did, however, receive a response from Which? that contained willingness to pay estimates related to consumer choice over data⁹¹. The estimates from this response have been utilised to inform the quantification of benefits within this analysis.

What has been quantified at this stage

101. A number of PCIs and CRs have been identified in this IA and where possible a quantitative assessment of their impact has been made. The CMA's 'Online platforms and digital advertising market study' was used to identify a range of PCIs and CRs that may be implemented by the DMU⁹². The CMA made a range of recommendations in this market study, which were taken into account in the decision to select specific interventions for inclusion in this IA. However, as mentioned previously the availability of data limited what could be quantified.
102. Building on from the consultation Impact Assessment, this IA includes the quantification of (i) compliance costs, (ii) familiarisation costs that SMS firms may incur as a result of the regime, (iii) conduct requirements designed to ensure that choices and default settings are presented to users in a way which allows them to make informed decisions about an SMS firm's digital activity, and (iv) a range of PCIs (choice screens, data openness measures, choice requirement remedies and interoperability).
103. In this IA a range of potential benefits have also been quantified. This includes the potential benefits that may result from the implementation of (i) a choice requirement remedy PCI, (ii) a data openness PCI, (iii) additional merger transparency, and (iv) conduct requirements designed to ensure that choices and default settings are presented to users in a way which allows them to make informed decisions about an SMS firm's digital activity

What hasn't been quantified at this stage

104. As mentioned above, while this IA goes further to quantify impacts, there remain gaps. First, in terms of costs, this IA does not quantify the potential wider impacts that result from improvements in competition. For instance, the loss of revenue SMS firms may experience as a result of improvements in competition. For instance, the CMA estimated that Facebook and Google in 2018 alone earned a total of £2.4bn in profits above what is required to reward investors with a fair return.⁹³ The significant revenue Facebook and Google have been able

⁹¹ Which?, [Value of the Choice Requirement Remedy](#), 2021

⁹² Online platforms and digital advertising market study
<https://www.gov.uk/cma-cases/online-platforms-and-digital-advertising-market-study>

⁹³ The CMA's profitability analysis has shown that both Google and Facebook are consistently earning profits well above what is required to reward investors with a fair return. The CMA have demonstrated this by comparing estimates for Google and Facebooks return on capital employed (ROCE) with their weighted average cost of capital (WACC) - [Online platforms and digital advertising market study](#), page 317,
<https://www.gov.uk/cma-cases/online-platforms-and-digital-advertising-market-study>

to generate through high advertising prices is likely facilitated by insufficient competition in digital markets. Therefore, if the range of interventions considered in this IA are successful in improving competition in digital markets it is possible that SMS firms will be forced to lower prices in an attempt to compete with rivals and new entrants. The direct consequence of this could be a potential reduction in revenue for SMS firms. However, this may be matched by an increase in consumer surplus or an increase in revenue for competitors.

105. Second, this IA does not quantify the full costs and benefits associated with the conduct requirements. The policy intention is for a list of categories of conduct requirements and high-level objectives to be set out in legislation. The categories of conduct requirements provide a list of issues and conduct in regards to which the DMU can set binding conduct requirements on an SMS firm. This gives the DMU the flexibility to adapt to future changes in digital markets, however, it makes quantifying the potential impact of the conduct requirements difficult at this stage. This is because (i) the objectives and associated categories of conduct requirements are deliberately broad to allow the DMU flexibility in setting conduct requirements; and (ii) there is not a complete list of the specific conduct requirements that will be implemented.
106. Third, this IA does not quantify a range of potential benefits (beyond prices) that may result from improvements in competition. The main purpose of improving competition in digital markets is to address the long list of consumer harms that derive from insufficient competition. For instance, the CMA identified a range of forms that consumer harm can take in the 'Online platforms and digital advertising market study'.⁹⁴ This includes reduced innovation and quality, higher prices of goods and services across the economy and broader social harms. The Government expects that the main benefits of the regime will be a reduction in consumer harm and these have been explained qualitatively in sections 8C and 8F.
107. This IA does not quantify the scale of any indirect deterrence effects of the regime to the wider digital ecosystem. From previous research, the deterrent effects of competition law enforcement are significant and can often be larger than the direct impacts.⁹⁵ The deterrent effects of a sample of previous CMA CA98 cases⁹⁶ have had indirect to direct benefit ratios estimated between 2.7:1 and 21:1.⁹⁷ Government understands that each competition case is unique and that the extent of any indirect benefits will depend on the specifics of that case; it may not be appropriate to directly use these ratios for the interventions of the pro-competition regime. There are also uncertainties as to the specific interventions from the pro-competition regime. With these considerations in mind, this IA takes a conservative position not to provide a monetised indirect benefit associated with these measures.
108. Lastly, at this stage this IA has not undertaken an assessment of the range of potential remedies under the pro-competition regime that may be used to address competition issues within the UK's mobile ecosystem. This is because the CMA has not reached any final views as to whether any particular interventions are warranted.⁹⁸

Structure of the Indicative Cost-Benefit Analysis

109. For ease, the Indicative Cost-Benefit Analysis has been organised according to the different types of costs and benefits quantified, and whether the impact falls on businesses or consumers:
 - **Section 8A - Transition costs:** This section details the approach taken to estimating the transition costs to businesses and the government that would arise from

⁹⁴ Online platforms and digital advertising market study

<https://www.gov.uk/cma-cases/online-platforms-and-digital-advertising-market-study>

⁹⁵ Deterrent Effects of Competition Authorities Work <https://www.gov.uk/government/publications/deterrent-effect-of-competition-authorities-work>

⁹⁶ CMA, [Guidance on the CMA's investigation procedures in Competition Act 1998 cases](#), 2021

⁹⁷ CMA Evaluation of CA98 cases <https://www.gov.uk/government/publications/evaluation-of-direct-impact-and-deterrent-effect-of-ca98-cases>

⁹⁸ CMA, [Mobile ecosystems market study interim report](#), December 2021.

implementing the shortlisted options. This includes: familiarisation costs; as well as DMU funding costs.

- [Section 8B](#) - **Ongoing costs**: This section details the approach taken to estimating the ongoing costs to businesses that would arise from implementing the shortlisted options. This includes: compliance costs; conduct requirement costs; and PCI costs.
- [Section 8C](#) - **Transition benefits**: In this impact assessment, we have taken a conservative approach to estimating the benefits and have therefore assumed that the benefits will not occur during the transition period and instead will start from 2026 (i.e following implementation).
- [Section 8D](#)- **Ongoing benefits**: This section details the approach taken to estimating the benefits that would arise from implementing the shortlisted options. This includes: benefits associated with the merger regime, conduct requirements and individual PCIs.

110. Given the uncertainty around the way in which the regulator will decide to utilise these powers, where possible this IA has made use of evidence-based assumptions and proxies in order to estimate some of the potential impacts. At this stage, this represents our best guess of the potential impact and is not necessarily indicative of the DMU's future actions.

Number of businesses in scope

111. As mentioned above, SMS designation is a mechanism that would ensure that the new regime is appropriately targeted at a small number of digital firms that have substantial and entrenched market power in respect of a digital activity, providing them with a strategic position, and so where the risk of harm is greatest. Under the preferred policy option, a firm can only be designated if it has UK revenue of >£1 billion or global revenue of >£25 billion. To this end, the SMS designation process would, by design, only capture the largest firms within digital markets. As the DMU have not yet undertaken any SMS designation assessments, it is not clear which firms would be subject to regulation under this regime. However, for modelling purposes we have assumed that 4 firms would be designated. This assumption is based on publicly available information such as the Online platforms and digital advertising market study and the Mobile Ecosystems market study.⁹⁹

112. There is a 10-year appraisal period between 2025-2034 for this impact assessment, utilising an annual discount rate of 3.5%. The costs and benefits have been split into transitional and ongoing values and these are presented below for all policy options.

8A - Transition costs

Costs to Business

Familiarisation costs to digital market firms

113. The department has assumed that there will be a one-off familiarisation cost for SMS firms (i.e. SMS firms will have to spend time familiarising themselves with the new regulation). It is possible that non-SMS firms also choose to familiarise themselves but this hasn't been accounted for. The estimated costs may therefore be underestimated.

114. The table below (Table 7) highlights the assumptions that have been used to estimate familiarisation costs per firm, under the preferred policy option. The overall cost has been estimated by multiplying the firm level familiarisation cost by the estimated number of firms within scope. The Government assumes that only firms designated with SMS will need to

⁹⁹ Online platforms and digital advertising market study; Mobile ecosystems market study interim report, December 2021.
<https://www.gov.uk/cma-cases/online-platforms-and-digital-advertising-market-study>

familiarise themselves with the full guidance. The CMA will provide clear guidance around what characteristics will be considered during an SMS investigation, which will limit the number of firms that choose to undertake familiarisation activity to those in scope.

Table 7: Estimated familiarisation costs (central scenario in Option 2) - 2022 prices

Total familiarisation cost		Reading cost		Legal review cost
A		B		C
£1.2m	=	£0.1m	+	£1.1m

Key:

- **A** = The estimated total familiarisation cost per firm in year 1
- **B** = (Time spent reading) x (Number of people reading) x (Uplifted hourly wage estimate¹⁰⁰) x (Number of firms)
- **C** = (Time spent reading) x (Number of people reading) x (Hourly pay rate estimate) x (Number of firms)

Inputs:

- B = ((300 words per page/100 words per minute¹⁰¹) x 670 pages)) x (20 workers x £39.33 an hour x 4 firms)
- C = ((300 words per page/50 words per minute¹⁰²) x 670 pages)) x (8 lawyers x £527 an hour x 4 firms)

115. There is an expectation that familiarisation costs will vary across the different policy options shortlisted. In order to estimate this variation, the assumed number of pages of guidance have been altered to be relevant to each option. For example, firms will have no need to read guidance for PCIs or mergers in option 1. The table below highlights the total familiarisation costs across policy options.

Table 8: Familiarisation cost - pages assumption sensitivity analysis

	Option 1	Option 2	Option 3
Low	440	560	680
Central	530	670	815

¹⁰⁰ Includes overhead costs.

¹⁰¹ The assumptions are based on those utilised in a recent FCA document - FCA (2021) [Changes to the SCA-RTS and to the guidance in 'Payment Services and Electronic Money](#) – Our Approach' and the Perimeter Guidance Manual, (FCA consultation paper)

¹⁰² As a conservative assumption, it's assumed that lawyers will require double the time of members of the compliance team to familiarise themselves with content, in order to take into account the potential for the consideration of technical and legal implications.

High	615	785	950
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116. The assumptions outlined in the table above are based on recent engagement with the CMA to identify the volume of guidance that may be produced relating to the pro-competition regime. As this guidance is still to be produced, there is uncertainty around just how many pages SMS firms will be required to familiarise themselves with and therefore sensitivity analysis is utilised in this IA to account for this uncertainty. The figures in the low scenario are based on CMA estimates, and those in the central and high scenarios are rated up by 20% and 40%, respectively.
117. This estimation of familiarisation costs does not take into account the potential for firms providing training and dissemination of information throughout the organisation. The Government believes that the assumptions outlined above take into account the appropriate number of staff within SMS firms that will need to familiarise themselves with regulations. In addition, this analysis utilises significant changes in assumptions through the sensitivity analysis in order to account for any potential additional costs. Therefore, the Government believes that the estimates provided below reflect the activity that SMS firms may choose to undertake. However, if SMS firms were to disseminate information throughout the organisation, this would likely have a significant impact, greater than that outlined below, given the large number of employees within these firms.

Table 9: Estimated familiarisation costs by policy option - 2022 prices

	Option 1	Option 2	Option 3
Familiarisation cost	£0.8m - £1.1m	£1.0m - £1.4m	£1.3m - £1.8m

8B - Ongoing Costs

Costs to the Government/SMS Firms

118. Across all the shortlisted options there will be costs associated with the day-to-day operation of the regime. These will include both one-off set up costs, such as purchasing IT and initial recruitment processes, and ongoing operational costs, such as salaries for employees. However, the ongoing costs/operational costs will vary depending on the scope of the regime, which varies across the shortlisted policy options. Under option 1, the DMU's regulatory powers will be limited to the implementation of conduct requirements and the powers granted to the DMU are extended under options 2 and 3, with option 3 being the most comprehensive set of operations for the DMU.
119. The direct costs associated with the day-to-day operation of the DMU, under option 3 have been estimated by the CMA. Furthermore, realistic assumptions have been made around the estimated FTE requirement, broken down by activity, which has formed the basis for the variation in cost estimates across policy options. For instance, option 1 does not include PCIs or SMS merger reporting requirements and therefore there is an expectation that the regulator's costs will be substantially lower (39% relative to option 3)¹⁰³. We have assumed that without the legislation the shadow DMU would not be operational and we have therefore assumed that these costs would be additional. The costs outlined in the table below will be borne by both the Government and SMS firms, through a levy. The legislation establishes a levy to recoup the costs associated with the regime, and sets out its parameters including that the CMA cannot collect more than the costs of the regime or recoup litigation costs. The CMA will be responsible for developing the methodology for the levy in Rules and will consult on

¹⁰³ Note that the total resource by activity is assumed to remain constant across the appraisal period. This assumption has been made purely for modelling purposes and in reality, the level of resource required will depend on the type of DMU investigations.

those Rules. With this in mind, we estimate that between 90-95% of the costs will be covered by the levy and therefore fall on SMS firms. The table below outlines the proposed splits based on the activities that are in scope to potentially be recovered through the levy, across the options considered.

Table 10: Estimated steady state costs of the Pro-Competition Regime (per annum) - 2022 prices, as agreed by HMT

	Option 1	Option 2	Option 3¹⁰⁴
Estimated (indicative) cost	£17m	£24m	£28m
Cost to Government	£0.8m-£1.7m	£1.2m-£2.4m	£1.4m-£2.8m
Cost to SMS firms	£15m-£16m	£22m-£23m	£25m-£26m

To note: The merger fee falls to the merging parties through the current merger fee process.¹⁰⁵

Costs to Businesses

Compliance costs

120. There will be compliance costs for SMS firms across all shortlisted policy options. However, similarly to regulator costs, the costs are expected to vary with the scope of the regime. The estimated compliance costs for SMS firms across all shortlisted policy options have been differentiated between (i) intensive initiation processes that are part of the regime (e.g. SMS designation) and (ii) ongoing compliance costs when in 'steady state' (from 2024). The direct compliance costs to SMS firms will be costs associated with additional staff time (i.e. production of compliance reports). In line with current broader market investigations (i.e. EA02 investigations), this IA assumes that additional staff time includes: (i) legal, (ii) economists, and (iii) administrative roles.

Intensive initiation process

121. At the consultation stage, the Government attempted to gather evidence on compliance costs for SMS firms. However, the Government did not receive any quantitative suggestions to further assumptions and analysis. Therefore, due to a lack of available evidence, the department has looked for alternative methods and identified useful proxies to estimate the potential costs to SMS firms. BEIS recently led a business survey exercise with parties involved in various competition and merger assessments to further understand the associated business impacts. As part of this, the business impacts of EA02 market investigations were requested. EA02 investigations look at a broader market to assess the presence of any competition concerns. Following engagement with the CMA, the Government has concluded that these types of investigations are a reasonable proxy for the likely process encountered by SMS firms in the intensive initiation process such as SMS designation (which includes the collection of information necessary to compile tailored conduct requirements) and PCI investigations.

122. With regards to EA02 investigations, the business survey requested firms to provide their assessments of the number of lawyer and economic professional hours that were externally

¹⁰⁴ The CMA has a legal duty to investigate mergers that are notified. The scale of these costs would depend on the design of the relevant thresholds.

¹⁰⁵ The merger fee thresholds are based on the UK turnover of the acquired firm. As many digital acquisitions are of high value but low turnover it is likely that the applicable fees would be at the lower end of the current merger fee scale.

employed to comply with the investigation. To estimate the associated costs for these hourly rates of £523 and £357 were respectively used for external legal and economist time.¹⁰⁶ Internal compliance hours were not collected within the survey for EA02 investigations but were for other competition and merger processes. Therefore, to estimate the internal resource that is required in EA02 investigations, the average cost ratio between legal representatives and internal admin from the rest of the survey was used. This produced a 10:1 cost ratio. This ratio is assumed to be consistent across the various competition processes and is used as a proxy to estimate the internal administration costs. The table below (table number 10) highlights the central EA02 cost estimates associated with the phase 2 investigation stage¹⁰⁷.

Table 11: Intensive initiation process compliance costs (Policy option 2)

Costs	Estimates
Legal costs	£1.58m
Economic costs	£0.63m
Admin costs	£0.16m
Total (per SMS firm)	£2.37m
Number of SMS designations and PCI investigations per annum	4
Overall estimated annual cost	£9.5m

123. To estimate total costs associated with each policy option, the estimate in table 9 is multiplied by the estimated number of SMS designations in year 1 (which include the collection of information necessary to compile tailored conduct requirements). This IA makes an inductive assumption that there will be 4 SMS designations in the first year of the regime, and each firm will face one PCI investigation per annum from year 2 onwards. To this end, the overall estimated 'initiation' compliance cost is c. £9.5m per annum. It is worth noting that this assumes SMS firms will mainly utilise external resources in order to comply with intense processes, resulting in a larger, more conservative, estimate.
124. As mentioned above, the compliance costs are expected to vary with the scope of the regime and therefore the expected compliance cost estimate is altered according to the level of DMU activity. For instance, under policy option 1, the DMU will not have the power to undertake PCI investigations. With this in mind, under option 1 it's assumed that the only compliance costs faced by SMS firms will be complying with the SMS designation process in year 1 and ongoing compliance costs from year 2.
125. Given that the addition of the merger reporting requirements (option 3) will not require any additional engagement between firms and the regulator in the initial stages of implementation, it is assumed no additional costs to SMS firms between options 2 and 3. The compliance costs associated with option 3 are explored in ongoing compliance costs, below.

Table 12: Intensive initiation process compliance costs (across policy options) - 2022 prices

¹⁰⁶ For legal costs, HM Government, Solicitors' guideline hourly rates. It is assumed London Grade 1, Class A: Solicitors and legal executives with over 8 years' experience working in London (updated to 2022 prices). For economist costs per hour it is believed that this level would be broadly in line with what would be expected for economic consultancies.

<https://www.annualreports.com/Click/23295> (P56 - average economic consulting billable hours converted to pounds).

¹⁰⁷ At Phase 1, the CMA determines whether it believes the activity results in a realistic prospect of a substantial lessening of competition (SLC). If so, the CMA has a duty to launch an in-depth assessment (Phase 2).

	Option 1 ¹⁰⁸	Option 2	Option 3
Intensive compliance costs (external)	£8.8m (first year only)	£8.8m per annum	£8.8m per annum
Intensive compliance costs (internal)	£0.6m (first year only)	£0.6m per annum	£0.6m per annum
Total	£9.5m (first year only)	£9.5m per annum	£9.5m per annum

Ongoing compliance costs

126. As mentioned above, there will be ongoing compliance costs that would likely be less intensive than during the initiation process phase. This would involve staff within SMS firms ensuring compliance and producing compliance reports to clearly set out how they have complied with implemented measures, as set out in legislation. It is reasonable to assume that large SMS firms already have in-house compliance teams that ensure that rules and regulations are being followed. Therefore, the additional FTE, required as a result of the introduction of these proposals, has been considered within this analysis.
127. Table 13 (below) outlines the assumptions for each scenario within our sensitivity analysis. The high and low scenarios came from research into the size of compliance teams within Telecommunications companies.¹⁰⁹ The size of compliance teams within Telecommunication firms have been used as a proxy for the potential size of compliance teams that may be deployed in response to this regulation¹¹⁰.
128. In estimating the ratio of lawyers to compliance officers, we have carried out sensitivity analysis around a central assumption of legal resources being equal to 15% of policy resources. This assumption is purely indicative as the Government was unable to identify evidence to inform this.

Table 13: Ongoing compliance costs (FTE sensitivity)

Scenario	Low	Central	High
Legal	0.5	1.5	4
Policy	5	10	20

129. Using ASHE data and HM Government's solicitors hourly rates (in order to estimate a hourly rate for lawyers employed by SMS firms), this IA assumes an hourly wage of £39.33 for the

¹⁰⁸ Option 1 includes conduct requirements; option 2 includes conduct requirements and PCIs; option 3 includes conduct requirements, PCIs and merger requirements.

¹⁰⁹ Desk based research into job titles on LinkedIn

¹¹⁰ These assumptions are based on LinkedIn search results. The search was narrowed using location ("London"), Job title ("Compliance" Compliance Officer) and Company name (BT, Vodafone, Virgin and O2). The size of compliance teams varied across companies (i.e. the number of relevant results). For instance, there were only 4 relevant results for BT but 20 for Vodafone. The average number of relevant results/number of team members was 9.

compliance team¹¹¹¹¹² and £527 for legal counsel.¹¹³ In order to estimate the annual cost of a full time compliance officer and solicitor, the hourly wage estimates are multiplied by the average number of hours in a working year.¹¹⁴ Using this approach, the estimated annual compliance cost for SMS firms is between £3.9m and £24.1m (2022 prices).

130. This estimate can be benchmarked against the European Commission's Digital Markets Act (DMA) Impact Assessment¹¹⁵, which proposes similar measures. The European Commission estimates the compliance cost per gatekeeper firm per annum at €1.41m (around £1.2m)¹¹⁶. This suggests total compliance costs of £4.9m (2022 prices) across an assumed four gatekeeper/SMS firms, which is somewhat in line with our low estimate.
131. The estimate outlined above is representative of policy option 2 (i.e. DMU with conduct requirements and PCIs). In order to estimate the relevant cost for option 1, this IA assumes that compliance costs will vary across policy options in line with the resource requirement of DMU activities. Whilst the resource requirements for firms to comply with regulations will not be perfectly in line with that of the DMU in delivering the regime, it is reasonable to assume that where the scope of the regime increases, further compliance activity will be required, and in the absence of a more appropriate assumption, the Government feels that this is appropriate to use. Cost estimates for options 1 and 2 are scaled as such (see table 13 below).

Merger requirements compliance costs

132. Another aspect of the digital competition reforms is additional transparency requirements for mergers. Introducing new SMS merger requirements will lead to an increase in the number of cases that are reported to the CMA. Parties going through an SMS merger review will incur compliance costs:
- administrative costs for gathering the appropriate information and reporting transactions which meet the criteria, and
 - responding to information requests from the CMA and attending calls and meetings.
133. Through consultation with the CMA and from reviewing historic M&A data it is estimated that within the proposed thresholds for reporting (as highlighted earlier in the Impact Assessment, paragraph 53) there would be 30-40 mergers required to submit a report.¹¹⁷ Where transactions would fall under the reporting thresholds, some or all of these costs would already be incurred. Through this analysis this IA seeks to estimate the additional cost to SMS firms due to the reporting thresholds, above the level of costs that they would have likely incurred under the current regime. It has been assumed that the associated costs for complying with the merger reporting requirements would be additional given the new process.
134. As a baseline this IA assumes that the CMA would have opened a formal investigation for 3-5 mergers per year, reflecting the CMA's recent activity reviewing additional mergers by large digital firms.¹¹⁸ It is unclear how many of the new reports will result in a formal merger

¹¹¹ [According to Indeed the average annual salary for a lawyer in the UK is £50,344](#), which equates to £29 an hour (assuming a 36 hour week). Similarly, [Reed data](#) suggests that the average salary across the UK for a lawyer is £49,325 or £28.5 an hour.

¹¹² The hourly wage for 'Quality Assurance and Regulatory Professionals' role (closest matching occupation for compliance staff in the ONS ASHE data; 4 digit SOC), in the 80th percentile (the highest available)

<<https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/earningsandworkinghours/datasets/occupation4digitsoc2010ashtable14>>, uprated by 22% to account for non-wage costs, in line with [RPC guidance](#)

¹¹³ HM Government, [Solicitors' guideline hourly rates](#). This IA assumes London Grade 1, Class A: Solicitors and legal executives with over 8 years' experience working in London.

¹¹⁴ Assume 1 FTE = 2080 hours per annum <<https://www.accountingtools.com/articles/how-to-calculate-ftes.html>>

¹¹⁵ [Regulation of the European Parliament and of the council on contestable and fair markets in the digital sector](#), 2020

¹¹⁶ Using the exchange rate for Nov 2021 - 1.18.

<<https://www.ons.gov.uk/economy/nationalaccounts/balanceofpayments/timeseries/thap/mret>>

¹¹⁷ From reviewing relevant MergerMarket and Capital IQ data, through the combination of thresholds, it was estimated that 26-33% of SMS mergers would be excluded from the reporting requirement. This estimate was subsequently sense checked with the CMA and appropriate ranges were developed to highlight the uncertainty in future case estimates.

¹¹⁸ The number of baseline merger investigations that would have otherwise been investigated by the CMA have been estimated in consultation with the CMA. Through this assessment, current investigation levels of the CMA were reviewed and consideration was given to the increasing level of scrutiny that there has been in recent years on digital acquisitions.

investigation. This is because the purpose of the reporting requirement is to make the CMA aware of cases that they may not have otherwise have been alerted to. A merger would only be called in for a phase 1 investigation if there are sufficient competition concerns to warrant it. Given the uncertainty of the cases that would be called in for an investigation following a report, it is assumed that the rate of conversion to an investigation would be between 0% and 20% of the reports leading to a range of 0-8 additional phase 1 investigations annually. The central case assumes 35 reports per year with a 10% conversion to investigations.

135. The costs associated with a merger that has been called in for review will depend on the complexity of the case. Mergers that require an in-depth phase 2 investigation will incur greater compliance costs than those cleared after the initial investigation. As it is assumed that the CMA will likely be reviewing additional cases, it is envisaged that a subset will be referred to Phase 2. Based on the number of additional merger investigations expected and the average referral rate from Phase 1 investigation to Phase 2 of 15%, between 2014/5 and 2020/21,¹¹⁹ It is estimated that there would be between 0 and 1.2 additional phase 2 cases per year.
136. To estimate the associated costs to comply with these merger requirements, evidence from a BEIS led business survey, which requested business impacts associated with different stages of merger reviews, was used. This survey requested information regarding internal resource needs, external economic consultants and external legal time. The survey results and engagement with the CMA informed the compliance cost estimates presented in Table 14 below.

¹¹⁹ CMA merger enquiry outcomes. Data from 7 years has been used to reflect the long-term phase 2 referral rate by the CMA. Available at: <https://www.gov.uk/government/publications/phase-1-merger-enquiry-outcomes>

Table 14: SMS merger reporting and investigation business compliance costs (2022 prices - rounded to the nearest thousand)¹²⁰

Costs	Reporting ¹²¹			Phase 1 investigation			Phase 2 investigation		
	Low	Central	High	Low	Central	High	Low	Central	High
Legal costs	£26,000	£46,000	£67,000	£276,000	£409,000	£541,000	£1,379,000	£2,043,000	£2,707,000
Economist costs	£0	£0	£0	£0	£281,000	£368,000	£0	£1,394,000	£1,849,000
Internal administration costs ¹²²	£3,000	£5,000	£7,000	£26,000	£46,000	£56,000	£31,000	46,000	£66,000
Total estimated cost per case	£28,000	£51,000	£73,000	£301,000	£730,000	£965,000	£1,410,000	£3,484,000	£4,623,000
Annual number estimated	30	35	40	0	3.5	8	0	0.5	1.2
Total estimated cost (£millions)	£0.84m	£1.77m	£2.92m	£0.00m	£2.56m	£7.72m	£0.00	£5.61m	£5.61m

¹²⁰ Calculations may not correspond due to the effect of rounding. It should be noted these estimates are sensitive to the assumed caseloads and cost to business of merger reviews, in particular legal costs. Ranges have been used to highlight this sensitivity. SMS merger compliance costs have not been assumed in the first year of the pro-competition regime. It is assumed that the first year would be used to designate the appropriate firms with SMS status and the merger requirements compliance will commence upon designation.

¹²¹ Merger briefings were used as the base for the merger reporting estimates. Through the sense checking process, the CMA highlighted that they believed the associated costs to comply will likely be lower than this. Given the reporting requirement is a new process, the Government has decided to maintain the full merger briefing compliance costs as to not underestimate the resource burden to firms.

¹²² Internal administration costs involved with notifying merger cases and phase 2 assessments were gained directly from the business survey. Respondents provided a breakdown of estimated hours which were then transferred into a cost through using updated ASHE data to account for non-wage employment costs. Internal administrative costs for reporting were estimated by using the legal to admin cost ratio of 10:1 from the rest of the survey as respondents did not provide this information. This ratio is discussed further in the section above.

Conduct requirements

137. The objective of the conduct requirements is to enable the DMU to manage the effects of market power by setting out how firms with SMS are expected to behave. They will provide a set of clear, legally enforceable, ex ante principles for SMS firms to follow, with the aim of preventing end users and businesses from being exploited, and other practices that could undermine fair competition.
138. Three high level objectives of the conduct requirements will be set out in legislation along with categories of conduct requirements. The objectives relate to (i) fair dealing, (ii) open choices and (iii) trust and transparency. These objectives determine the scope of the conduct requirements. Any conduct requirements imposed on firms must fall within the categories of requirements set out in legislation. However, the details of the specific conduct requirements to be imposed will only be determined by the DMU and tailored to the SMS firm and the activity it is aiming to address.
139. At this stage it has not been possible to accurately quantify all the potential impacts of the conduct requirements. However, this IA quantifies the potential costs associated with a small number of interventions suggested by the CMA in their online platforms and digital advertising market study. For example, it looks at some categories of conduct requirements which could be used by the DMU to implement the CMA's recommendation to include requirements on a platform to take steps to ensure that they are promoting consumers' awareness of, and ability to make informed choices about the relevant digital activity, including the use of their personal data. In addition to this example, we have sought to quantify the potential loss of revenue that SMS firms might experience as a result of conduct requirements relating to self-preferencing behaviour. Where it has not been possible to quantify the potential impact of the conduct requirements, this IA describes the impact qualitatively in this section.

Direct costs to SMS firms associated with the implementation of conduct requirements designed to ensure that choices and default settings are presented to users in a way which allows them to make informed decisions about an SMS firm's digital activity, as recommended by the CMA

140. To estimate the potential direct costs to SMS firm's similar government interventions have been identified. The third security guideline under the code of practice for consumer connected products, requires manufacturers to explicitly state the minimum length of time for which a device will receive software updates and the reasons for the length of the support period¹²³. Similarly, to conduct requirements that ensure users can make choices about how they interact with an SMS firm's digital activity, the aim of this principle is to increase transparency and provide consumers with more information.
141. RSM undertook research, on behalf of DCMS, with the aim of evidencing the cost of the UK government's proposed regulatory interventions for consumer IoT. This included estimating the costs associated with the third security guideline under the code of practice for consumer connected products. Findings from the RSM survey¹²⁴, indicated that the average amount of staff time required for compliance with this principle under the code of practice would be 91.4 person-days annually, mostly within IT professional/technical roles, and sales and marketing roles - amounting to an average annual cost of £17,631 per manufacturer, decreasing to an annual cost of £12,958 from year 2. Year one costs are higher because they account for additional costs associated with the implementation of this requirement. While this requirement (under the government's proposed regulatory interventions for consumer connected products) differs from conduct requirements that would ensure users have the ability to make informed choices about how they interact with an SMS firm's digital activity, DSIT believes that the

¹²³ DCMS, [Code of Practice for consumer IoT security](#), 2018

¹²⁴ RSM, 2020. [Evidencing the cost of the UK Government's proposed regulatory interventions for consumer IoT.](#)

estimated costs are a reasonable proxy for the type of costs SMS firms would incur as both interventions require firms to provide information to users.

Table 15: Costs associated with conduct requirements designed to ensure that choices and default settings are presented to users in a way which allows them to make informed decisions about an SMS firm’s digital activity - undiscounted, in 2022 prices

	Estimated cost
Annual direct cost to SMS firms	£17,631 in year 1 and £12,958 from year 2
Estimated number of SMS firms impacted	2
Total estimated impact (across the appraisal period):	£225k

Loss of revenue for platforms under a conduct requirement relating to self-preferencing behaviour

- 142. This section explores an example of self-preferencing behaviour within digital advertising markets. Other examples include the potential for self-preferencing to arise in app stores. For instance, Apple directly competes with app developers who use their app stores to reach consumers, which may create a potential conflict of interest.
- 143. Currently, a small number of firms enjoy a significant level of market power within advertising markets. One of the reasons for this is their ability to benefit from their presence on both sides of the market. For example, Google's large user base provides them access to a wealth of data that can inform advertisers. They also serve adverts to users through their services (e.g. Google Search and YouTube). This means separate parts of the same firm are operating and interacting within the open display advertising market¹²⁵.
- 144. The impact of different parts of the same firm being present within the market can amount to 'self-preferencing' behaviour. This is where one part of a firm favours the other part over any external competitors. In practice, Google may choose to do business with themselves, rather than a competitor, as this is beneficial to the wider corporate group, even if the merits of the bids do not align with the decision.
- 145. This behaviour stifles competition and quality within advertising markets, as regardless of any beneficial terms, it is unlikely that a competitor will be able to overcome an incumbent's tendency to choose itself.
- 146. The DMU will have the capacity to implement conduct requirements to prevent an SMS firm from using 'self-preferencing' behaviour to enhance its market power.
- 147. In a more competitive market, it is likely that incumbents will not be as successful in securing the advertising outcomes they want, as they are more likely to lose out to competitors. However, it is worth mentioning that the cost experienced by incumbents, relative to the counterfactual, is likely to be experienced as a benefit to competitors in the open display markets, or end consumers through the reduced price of consumer goods.

¹²⁵ CMA, [Online platforms and digital advertising market study: Appendix M](#)

148. The CMA market study estimated the total excess (above a reasonable return to investors) profits achieved by Google and Facebook in digital advertising at £2.6bn per annum (2022 prices).
149. Evidence suggests that SMS firms are able to set prices around 30-40% higher than their competitors. This IA makes fairly conservative assumptions that the requirement (through improving competition) would reduce price, and subsequently profits, by varying amounts. Using these assumptions, this IA estimates an annual benefit to advertisers and consumers through a reduction in the calculated 'excess' profits (i.e. lower prices passed through to consumers).

Table 16: The loss of revenue associated with a conduct requirement to address self-preferencing - Central Scenario

<i>Excess profits</i>		<i>Assumed reduction in excess profits</i>		<i>Assumed pass through</i>		<i>Reduction in price of consumer goods</i>
A		B		C		D
£2.6bn	X	5%	X	100%	=	£131m

Key:

- **A** = CMA advertising market study excess profit estimate
- **B** = Conservative assumption of the impact of reduced market power on price
- **C** = CMA advertising market study assumption of cost pass through to consumers
- **D** = Total estimated annual cost

150. Whilst it is reasonable to argue that an improvement in competition resulting from a conduct requirement against self-preferencing behaviour would result in downward pressure on price, given the current impact of market power, it is difficult to estimate how much price would be affected. Therefore, this IA utilises sensitivity analysis in order to account for this uncertainty with regards to the extent to which prices may be impacted.
151. The CMA online platform and advertising market study presents evidence that market power within advertising markets can have significant impacts on price. Google is able to extract 10-30% more than Bing for like-for-like queries, when observing price-bid ratios. Therefore, the Government feels it is reasonable to take a conservative assumption and assume up to a 10% reduction in excess profits as a result of a reduction in market power.

Table 17: Cost associated with a self-preferencing conduct requirement (across scenarios)

	Low cost scenario	Central Estimate	High cost scenario
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	(£m)	(£m)	(£m)
Assumed impact on price	1%	5%	10%
Estimated annual cost	£26.1m	£130.6m	£261.1m

Pro-competition interventions (PCIs)

152. One aspect of the regime that has the potential to result in additional costs to SMS firms is the introduction of Pro-Competition Interventions (PCIs). PCIs are designed to tackle the sources of SMS firms' market power in a relevant digital activity. If the DMU suspects that features of the market are causing a competition problem (known as an adverse effect on competition (AEC)) related to the market power of an SMS firm in a relevant digital activity, it can choose to launch a PCI investigation. Following this, if an AEC has been identified through its investigations, the DMU may issue binding PCI order(s). As the type and scope of the PCI recommended will only be known following (i) SMS designation and (ii) an investigation by the DMU, there remains lots of uncertainty over which PCIs will be implemented as the DMU will have discretion to design firm-specific remedies. That said, previous Market Studies published by the CMA such as the Online platforms and digital advertising market study, has served as a useful indicative guide to assess some of the measures that could be proposed and implemented.¹²⁶ To this end, for the purpose of this analysis, the Government has modelled which PCIs may be implemented. Based on previous research and engagement with the DMU, the Government expects that the DMU may consider implementing PCIs including:

- **Choice Screens** - Mandating that end users face choice screens for some key services (e.g. search engines). This will allow end users to make an active choice regarding their default search engine from a selection of viable alternatives at a key point in time, such as during the device or browser set up.
- **Data openness remedies** - Mandating third-party access to data where data is valuable in overcoming barriers to entry and expansion and privacy concerns can be effectively managed.
- **Interoperability remedies** - Mandating interoperability between the services of incumbents and competitors to overcome network effects and coordination failures.
- **Consumer control over data** (Choice Requirement Remedy) - Increasing consumer control over data, which includes providing choices over the use of data and facilitating consumer-led data mobility.

153. For modelling purposes, it is assumed that PCI impacts begin in 2026, given expected timelines related to the implementation of different measures.

Choice Screens

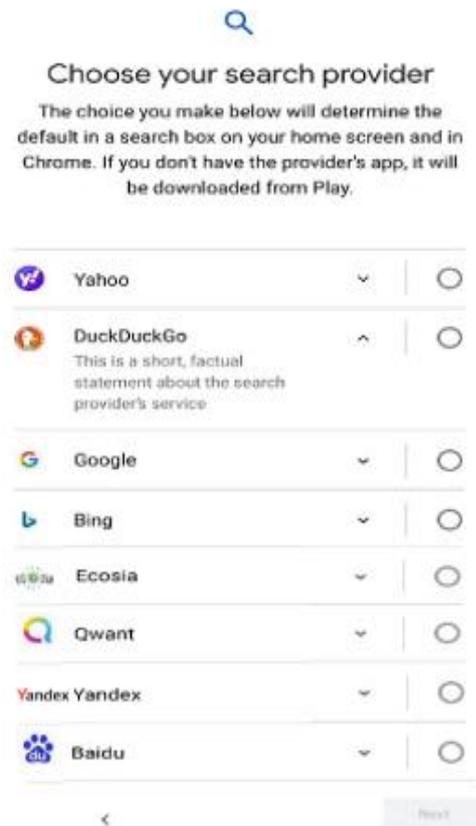
154. The CMA undertook an assessment of PCIs in general search and considered potential interventions to promote competition under two main categories:

- demand-side remedies – aimed at facilitating consumer choice and improving the ability of smaller providers to access consumers (i.e. choice screens); and
- supply-side remedies – aimed at overcoming scale advantages through the provision of third-party access to data.

¹²⁶ CMA, [Online platforms and digital advertising](#), July 2020

155. Choice screens are a mechanism aimed at improving consumers' access to alternative apps and services than those often provided pre-installed and/or as defaults on consumer devices; an example use case is search engines on smartphones and laptops. Choice screens provide users with the opportunity to make an active choice regarding their default search engine from a selection of viable alternatives at a key point in time, such as during the device or browser set up. An example of a 'choice screen' from the Appendix V of the CMA's Online platforms and digital advertising market study can be found below.¹²⁷

Figure 2: Choice screen example



Source: CMA. This image has been adapted from the Android choice screen page, using DuckDuckGo's research and logos found in Google images.

156. In estimating the potential costs associated with PCI's, a bottom-up approach has been taken and an example for choice screens can be found in Table 18. The direct costs associated with a software update (to allow for screen choice) for an SMS firm was estimated (the average cost of developing an app was used as a proxy¹²⁸) and then multiplied by the estimated number of operating systems firms in the UK, and then by the number of SMS firms active in the general search market. It is worth noting that PCIs cannot be applied to non-designated firms, we have hence assumed that there won't be any direct costs to non-SMS firms through the implementation of choice screens.

157. Given uncertainty around the cost of software update, this IA utilises sensitivity analysis and varies the complexity of the application. Under the high cost scenario, the app development process is assumed to be more complex (or costly) than in the best estimate scenario. It is assumed that these costs will apply in year one but that ongoing costs (i.e. from year 2 onwards) will be a fraction of the initial setup costs. More specifically, the ongoing costs (i.e. software maintenance) are assumed to be between 15-20 percent of the original development

¹²⁷ CMA, [Online platforms and digital advertising](#), July 2020

¹²⁸ Fierce Wireless, 2012, [Maintaining an app is critical its overall success](#). <Accessed on 14th February 2022>.

cost.¹²⁹

158. To estimate the costs per SMS firm associated with the implementation of choice screens, the estimated software update cost (Table 18) is multiplied by the estimated number of operating systems in the UK. This assumes that SMS firms, active in the general search market, will have to develop a separate choice screen for each operating system. Lastly, this cost is multiplied by the estimated number of SMS firms within general search.

Table 18: Cost of Choice Screens to SMS firms (undiscounted, in 2022 prices)

Step	Assumption	Input
1 - software update cost (one-off cost)	Estimated app development cost used as a proxy for the design and implementation of a choice screen.	£24,045 in the low estimate £36,068 in the central estimate £54,102 in the high estimate.
1 - software maintenance (ongoing cost)	It is assumed that ongoing costs will consist of software maintenance and this will be between 15-20 percent of the original development cost.	£4,208 in the low estimate £6,312 in the central estimate. £9,468 in the high estimate.
2 - Number of OS in the UK	Estimated number of operating systems in the UK (mobile + web based)	2 operating systems ¹³⁰
3 - Number of SMS firms impacted	Estimated number of SMS firms impacted	1 SMS firm
Total estimated Impact:	£99k - £222k	

Removal of default payments

159. As outlined above, large firms will pay large 'default payments' in order to be the default for particular devices. For example, Google paid around £1.2bn in 2019 in order to be the default search engine across a number of mobile devices. The implementation of choice screens would reduce the viability for these large 'default payments' to exist. Therefore, firms that currently receive these payments would be worse off relative to the counterfactual.

160. As mentioned, the magnitude of these payments can be significant, meaning that their removal may have a material impact on firms. However, as this payment is between companies, any loss of revenue for one firm would be a saving for the other, relative to the counterfactual, meaning the net impact is zero. Therefore, this impact is not quantified and taken into account within our analysis.

Data Openness (i.e. the provision of third-party access to data)

161. The Data openness measure considered in this section is an example of an intervention that would be used to promote competition under the supply-side category. The scope of this measure is still unknown; however, in the 'Online platforms and digital advertising market study', the CMA highlights that a data openness remedy could be used to require Google to

¹²⁹ Fierce Wireless, 2012, [Maintaining an app is critical its overall success](#). <Accessed on 14th February 2022>.

¹³⁰ While there are more than 2 operating systems in the UK, the DMU technical unit has informed us that the development of the choice screen will only vary significantly across mobile and web browsers.

provide access to a number of data points, potentially some or all of:¹³¹ user queries; users interactions; and search results. It should be noted that this is just an example of a data openness remedy - this type of intervention is not limited to general search.

162. The objective of this intervention is to increase competition by opening up valuable data to potential rivals in order to improve the quality of their services. To this end, it is expected that this type of intervention will have a direct impact on firms, like Google, in two ways. Firstly, if rival search engines successfully improve the quality of their services, it is possible that Google will lose market share and revenue. Secondly, there will be direct costs associated with the implementation of a 'data openness' measure. At this stage, due to insufficient information on the extent to which this intervention will lead to improvements in competition, it has not been possible to assess the potential loss of revenue that Google may experience. However, an attempt has been made to quantify the direct costs associated with the implementation of a 'data openness' measure.
163. Table 19 highlights the methodology used in estimating the direct costs associated with the data openness measure.
164. During the 2019 'Online platforms and digital advertising market study' the CMA received feedback from stakeholders on the data openness remedy. Google responded and suggested that it would be possible to share user data through a bespoke Application Programming Interface (API)¹³². Based on this suggestion, the Government has looked for examples of data openness measures that have been facilitated through APIs. The Transport for London (TFL) open data and digital partnership measure was identified as a good proxy example to estimate costs to Google of a data openness remedy measure. It is estimated to cost the organisation £1.1m annually.¹³³ However, a scaling factor¹³⁴, based on Google vs TFL users, has been used to account for the differences in the size of Google and TFL, and the associated difference in costs to implement the measure. In 2019, an average of 27m trips per day were made to, from or within London¹³⁵. This estimate is used as a proxy for the number of users of the TFL API. However, given the data available and for consistency we have compared UK Google user numbers to TFL user numbers. The estimated direct cost was multiplied by the likely number of SMS firms impacted, which in this case is assumed to be only Google.

Table 19: Cost of data openness remedy (undiscounted, in 2022 prices)

	Step/Assumption	Central Annual Estimate
1	Annual cost of sharing data through the development of an API (TFL open data intervention used as a proxy)	£1.1m
2	Scaling factor (Google average user numbers/TFL estimated user numbers)	1.7 (45m/27m)
3	Estimated number of SMS firms impacted	1
Total estimated cost		£13.4m

Interoperability

¹³¹ It should be noted that any data openness intervention will take into account and comply with existing regulations, such as GDPR.

¹³² CMA, [Online platforms and digital advertising](#), Appendix V page 20, July 2020

¹³³ Deloitte, [Assessing the value of TFL's open data and digital partnerships](#), July 2017

¹³⁴ API costs scale with the number of requests which is a scaling factor has been calculated. The [Google maps API](#) is an example of this.

¹³⁵ Travel in London Report 13 - <https://content.tfl.gov.uk/travel-in-london-report-13.pdf>

165. Platform interoperability refers to the ability of platforms to exchange data and different forms of functionality across their services. According to the CMA, interoperability in this context can help competition by enabling the positive network effects stemming from the large user base of an incumbent platform to extend to other platforms. Increased interoperability could place new entrants on a more equal footing with incumbents, which would make the market more contestable. This would help to facilitate competition on the merits as opposed to the size of the installed base.
166. In terms of assessing the potential costs associated with an interoperability measure, Government has referred to the CMA's assessment of pro-competition interventions in social media in which possible interventions are discussed¹³⁶. The CMA concluded that consumers should be able to (i) access their Facebook connections to invite them to other platforms and (ii) post content across platforms. While this technology currently exists between Facebook and some social media platforms it is not widespread. Based on the conclusions outlined above, the direct costs associated with this intervention would likely be borne by Facebook and would include costs associated with extending the software to allow posting, across platforms (i.e. both from and onto Facebook).
167. **Loss of revenue for platforms** - Interoperability measures will increase the functionality of competing platforms, which may encourage some consumers to switch away from incumbents. If the user base of a platform reduces, so will the revenue that these firms are able to generate. However, as outlined below, this cost to platforms will likely be seen as a benefit either for competing firms through an increase in their revenue, or through a reduction in data cost to users.
168. **Cost of software changes** - In order to facilitate increased interoperability with competitors, incumbents may be required to make software changes to their platforms, potentially including the creation of an API, as outlined in the data openness measure above. It is difficult to estimate the costs to SMS firms that may result from potential software updates as they are likely closely related to the specific design of the remedy in question. For instance, if the remedy solely focuses on 'contact list' interoperability - this may be relatively low-cost to achieve, relative to the counterfactual. For example, Facebook has implemented this API in the past (see [here](#)), meaning they have the capabilities to implement it again. Therefore, if the remedy just involved 'contact list' interoperability then the implementation costs may be small. In this scenario, it is assumed that the year one implementation costs will be £15,000 per SMS firm impacted. This is based on the estimated average API implementation costs built by an experienced developer.¹³⁷ Assuming that the software developer will have to ensure the API works for each major operating system, the API implementation cost is multiplied by 2 to account for (i) browser-accessed applications; and (ii) mobile applications. Therefore, the total estimated cost per SMS firm is £30,100, for year one. In line with the software maintenance cost estimate made above, it is also assumed that the maintenance cost (i.e. from year 2 onwards) will be 17.5% of the implementation cost. To this end, it is estimated that the annual ongoing cost will be £2,600 per SMS firm (see Table 20).
169. The estimated software costs above only account for 'contact list' interoperability, however, it is possible that an interoperability measure may go further and require 'content interoperability'. In this case, the direct costs to SMS firms may be significantly higher depending on the scope of the measure. At this stage, there is not sufficient information to assess the potential costs associated with a 'content interoperability' measure or the evidence to suggest that the DMU will introduce an interoperability remedy that will require SMS firms to make their content accessible across platforms. In contrast, a contact list is a simpler software change and therefore it is assumed that this type of intervention is a better representation of the type of interoperability measure the DMU will introduce in the first instance.

¹³⁶ CMA, [Online platforms and digital advertising](#), July 2020

¹³⁷ Plekton Labs, 2021, [How to calculate costs for building and API](#) <accessed on 15th February 2022>

Table 20: Interoperability cost estimate - undiscounted, 2022 prices

	Step	Estimate
1	Average cost associated with implementing an API	£15,000 (£2,600 ongoing cost)
2	Estimated number of operating systems (Mobile + Web based)	2
3	Number of SMS firms impacted	1
4	Total cost	£62k

170. In addition, one of the potential benefits of interoperability could be the creation and expansion of adjacent markets, like what has been seen following legislation around open data in the banking sector. Firms entering these markets and creating products may require significant levels of investment. However, firms will be making this investment on the basis that they expect an acceptable return, and access to data under new measures will make an acceptable return on investment more likely than it would be under the counterfactual.

Consumer choice over data (Choice Requirement Remedy)

171. As mentioned above, a choice requirement remedy aims to increase consumers' control over their data by giving them a choice over use of data and facilitating consumer-led data mobility (i.e. give consumers a choice over whether they want to receive personalised ads).

172. **Loss of revenue for platforms** - As outlined in the CMA online platforms and digital advertising market study, incumbent platforms are able to generate significant revenue, and charge more than competitors, as they are able to serve targeted ads (i.e. with likely higher return on ad spend) to a large user base. If a significant number of users choose to opt out of personalised advertising as a result of the implementation of this measure, incumbent platforms will lose revenue from advertising. However, it is worth mentioning that any reduction in revenue experienced by incumbents will be matched as a benefit on the consumer side through either a reduced data cost, or a reduction in the price of consumer goods.

173. **Loss of revenue for firms advertising on platforms** - As with platforms above, advertisers will likely also see a reduction in their revenues if a significant number of users choose to opt out of personalised advertising. A number of firms currently choose to target their advertising in order to have a better chance of their campaigns leading to increased revenue. If these firms are no longer able to target relevant consumers, then this may have a material impact on their revenues, relative to the counterfactual.

174. Whilst the evidence is not available to quantify this impact, the Government believes that any 'cost' to businesses relating to restricting collection of data will be outweighed by the benefits to consumers associated with reduced data costs, and the price of consumer goods.

175. **Cost of software changes** - In order to comply with this measure, platforms would need to provide users with an accessible option to opt out of receiving personalised advertising. For example, Facebook does not currently offer this option to its users and therefore software changes would need to be made. Google currently already offers this functionality; however, the measure will likely require this to be more accessible to users and therefore some changes will be needed.

176. Given that this measure requires platforms to present users with a choice, it should be reasonable to assume that the cost would be in line with that outlined under the 'choice screen' measure above.

Table 21: Software costs associated with the development of a choice requirement remedy - undiscounted, in 2022 prices

Step	Assumption	Input
1	Estimated app development cost used as a proxy for the design and implementation of a choice regarding advertising preferences	£24,045 in the low estimate £36,208 in the central estimate £54,102 in the high estimate.
1	It is assumed that ongoing costs will consist of software maintenance and this will be between 15-20 percent of the original development cost.	£4,208 in the low estimate £6,312 in the central estimate. £9,468 in the high estimate.
2	Estimated number of operating systems in the UK (mobile + web based)	1 operating system
3	Estimated number of SMS firms impacted	2 SMS firms
Total estimated Impact:	£99k - £222k	

8C - Transitional Benefits

177. In this impact assessment a conservative approach to modelling the benefits has been undertaken. With this in mind, it has been assumed that there won't be any transitional benefits (i.e. during the first few years following implementation of the legislation). This is to account for the time it will take for the DMU to gather evidence and undertake investigations. To this end, the government assumes that benefits will not materialise until 2026, in contrast to costs which start from 2023 onwards.
178. In this impact assessment we haven't quantified the potential benefits to businesses. However, the potential benefits to businesses are discussed in the 'Indirect benefits from increased competitive pressure' and the 'SAMBA' sections below. The potential benefits to users/consumers have been quantified and can be found in section 8E below.

8D - Ongoing Benefits to users

179. The main objective of the regime is to improve competition within and across digital markets to the benefit of consumers. As a result, a number of subsequent, pro-competitive impacts would be expected. For instance, the CMA identified a range of consumer harms that can take place in the online platforms and digital advertising market study.¹³⁸ These were reduced innovation and quality, higher prices of goods and services across the broader economy and broader social harms. To this end, the Government expects that the main benefits of the regime will be a reduction in consumer harm. In this section, the potential benefits of the regime are explained qualitatively and some of the potential benefits associated with specific PCIs (e.g. choice requirement remedy) have been quantified and can be found below (page 57).

Improved information availability - better quality regulation

180. The creation of a regulator dedicated to digital markets, that will partake in regular market monitoring, will increase the information available around a particularly opaque and complicated market. Improved information will allow for more informed decisions around regulation and future interventions that will lead to better outcomes for both businesses and end users.
181. The flexible approach taken to this regulation will also allow the regime to be 'future-proof', as it is able to change along with any developments within the innovative digital sector.

Conduct requirements

182. **Addressing unfair terms and conditions** - under the conduct requirements, the DMU will have the power to intervene to require SMS firms to deal on fair and reasonable terms. Conduct requirements that are implemented with the view to meet the fair dealing objective are intended to address concerns around the potential for exploitative behaviour on the part of the SMS firm. In the CMA mobile ecosystems market study,¹³⁹ a number of concerns that the CMA believe could be addressed under 'fair dealing' conduct requirements are highlighted. For example, there are concerns that Apple's contractual terms and conditions unreasonably restrict cloud gaming within their app store. In addition, there are concerns that certain mobile browser functionality within the mobile ecosystem defaults to Apple/Google even when users have selected an alternative. This type of behaviour has a negative impact on competition but also the quality of the service provided to consumers.

¹³⁸ CMA, [Online platforms and digital advertising](#), July 2020

¹³⁹ CMA, [Mobile Ecosystem market study](#), 2021

183. **Increased and better choices for consumers.** SMS firms have the ability to self-preference their own retail products by, for example, promoting their own goods for sale over those of third parties, or actively hiding third party goods.¹⁴⁰ For example, there are concerns that ranking in the app store (across both Apple and Google stores) is determined in a manner that favours the app store provider's own apps.¹⁴¹ Limiting the ability of incumbents to self-preference through conduct requirements would remove the costs to business users associated with this practice (e.g. loss of revenue) and increase choice to consumers.¹⁴²
184. **Reduced harm to end users** - under the conduct requirements, the DMU will have the ability to reduce the harms experienced by end users as a result of the exercising of market power by SMS firms. For instance, to achieve the 'fair dealing' objective the DMU may introduce requirements to prevent an SMS firm from applying discriminatory terms, conditions or policies to certain users or potential users. To achieve the 'open choices' objective, the DMU may introduce requirements to prevent an SMS firm from restricting interoperability between the relevant service or digital content and services or products offered by other businesses. In these instances, the DMU has the potential to intervene in an attempt to improve competition and reduce harm to both end users and businesses. Under the 'trust and transparency' objective, conduct requirements could help ensure that consumers and businesses that rely on SMS firms will be provided with clear and relevant information to understand what services SMS firms are providing, and to make informed decisions about how they interact with the firm. There is also the clear benefit for users to be given greater control over their data and appreciation of how it can be used; this is explored later as a case study.
185. **Increased economic activity from previously excluded firms** - Tools including the conduct requirements are expected to reduce the frequency and severity of *exclusionary* practices by SMS firms. As well as reducing harm to direct competitors, this should lead to an increase in the number of firms operating within digital markets by reducing barriers to entry. For instance, removing exclusionary practices (such as limiting competitors' access to important services or data) may encourage the creation of adjacent markets. It is estimated that the CMA's Open Banking remedy returns an annual benefit of £12bn for consumers, and £6bn for SME users. This could happen within digital markets, such as social media platforms, where new entrants could provide services for a central social media timeline, or an app for cross-platform messaging.¹⁴³ This is included to give an indication of the potential scale of benefits from these types of measures, and is not counted towards the impacts of the considered regulation.
186. **Discouragement of self-preferencing behaviour** - As outlined above, some large firms are able to benefit from their presence on both sides of the market. For example, Google's large user base provides them access to a wealth of data that can inform advertisers. They also serve adverts to users through their services (e.g. Google Search and YouTube). This means separate parts of the same firm are operating and interacting within the open display advertising market. This can sometimes lead to 'self-preferencing', where one part of a firm favours the other part over any external competitors¹⁴⁴.
187. The CMA market study investigated the difference in price between SMS firms and their competitors, finding that Google's revenue per search was 30-40% higher than that of Bing. Further research into price-bid ratios found that some of this can potentially be explained by the impact of market power, as Google is able to extract 10-30% more advertiser surplus than Bing for like for like queries.

¹⁴⁰ US House Majority Report

¹⁴¹ CMA, [Mobile Ecosystem market study](#), 2021

¹⁴² This assumes that end users would choose products sold by other business users absent self-preferencing by SMS firms. Research into the impact of increased transparency in search suggests that this is reasonable as high placement in search results increases the probability of a product being selected.

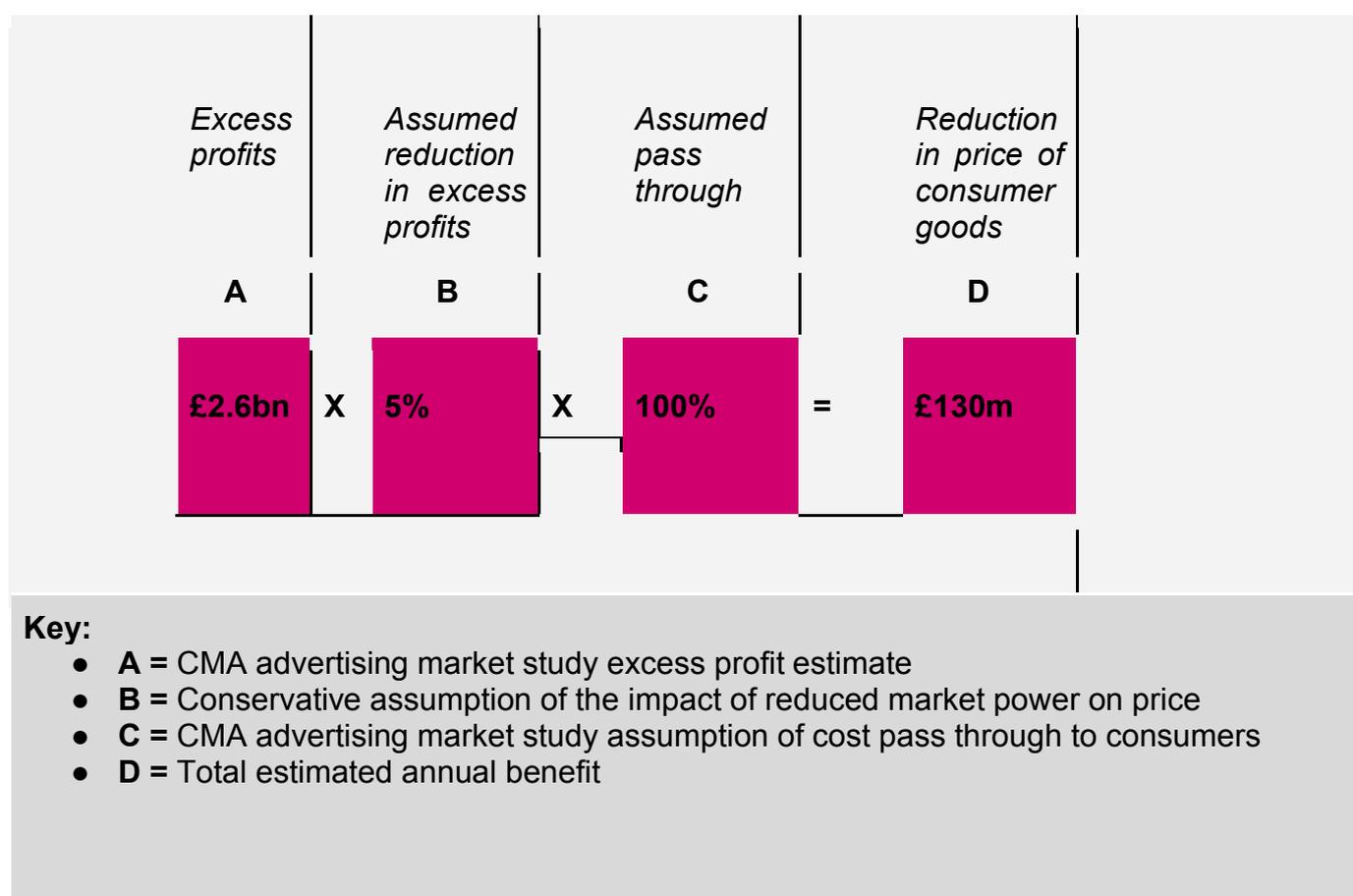
Veltri, Folkvord, Theben, & Gaskell (2020). [The impact of online platform transparency of information on consumers' choices](#). Behavioural Public Policy, 1-28.

¹⁴³ CMA, [Retail banking market investigation](#), 2016

¹⁴⁴ CMA, [Online platforms and digital advertising market study: Appendix M](#)

188. Self-preferencing activity by SMS firms furthers their market power. The implementation of a conduct requirement that prevents this behaviour would subsequently decrease the impact of market power, and reduce the surplus extracted by SMS firms as a result of increased prices.
189. The CMA market study also estimated the total excess (above a reasonable return to investors) profits achieved by Google and Facebook in digital advertising at £2.6bn per annum (2022 prices).
190. As outlined above, evidence suggests that SMS firms may be able to set prices around 30-40% higher than their competitors. This IA makes fairly conservative assumptions that the requirement (through improving competition) would reduce price by varying amounts. Using these assumptions, this IA estimates an annual benefit to advertisers and consumers through a reduction in the calculated 'excess' profits (i.e. lower prices passed through to consumers).

Table 22: The Benefits of a conduct requirement addressing self-preferencing - Central Scenario



191. Whilst it is reasonable to argue that an improvement in competition resulting from a conduct requirement addressing self-preferencing behaviour would result in downward pressure on price, given the current impact of market power, it is difficult to estimate how much price would be affected. Therefore, this IA utilises sensitivity analysis in order to account for this uncertainty.

Table 23: Benefits of a self-preferencing - Sensitivity Analysis

Scenario	Low	Central	High
Assumed impact on excess profits (as a result of reduced prices)	1%	5%	10%
Estimated annual impact	£26.1m	£130.6m	£261.1m

192. The CMA online platform and advertising market study presents evidence that market power within advertising markets can have significant impacts on price. As outlined above, Google is able to extract 10-30% more than Bing for like for like queries, when observing price-bid ratios. Therefore, the Government has taken a conservative approach and assumed up to a 10% reduction in excess profits as a result of a reduction in market power.
193. **Choice Requirement Remedy - additional impact of conduct requirements that further the 'trust and transparency' objective** - There is evidence that platforms do not give consumers the choice to turn off personalised advertising. Furthermore, those platforms that do provide a choice use default settings and choice architecture which make it difficult for consumers to make an informed choice and consequently users share more data than they might have otherwise decided to¹⁴⁵. Which? conducted a quantitative survey to investigate consumers' attitudes towards data collection methods used for the purpose of targeted advertising. The quantitative study consisted of an online survey of 1,729 adult Facebook users living in the UK. The results suggest that most survey respondents felt that they had not given their informed consent to data collection methods.¹⁴⁶
194. To address these concerns the CMA recommended that the DMU has the power to introduce interventions that would require platforms to give consumers more choice and control over the use of their data:
- The choice requirement remedy: This is an example of a PCI and therefore is discussed in more detail under the PCI benefit section of the IA (see table 27 below within section 8D).
 - Categories of conduct requirements to allow the DMU to require platforms to take steps to ensure that they are promoting consumers' awareness of, and ability to make informed choices about, the use of their personal data. A requirement on firms that captures this idea could be developed through different types of conduct requirements, for example, 'requirements to oblige the undertaking to provide clear, relevant, accurate and accessible information about the relevant digital activity to users or potential users in relation to the relevant digital activity' or 'requirements to oblige the undertaking to present to users or potential users in relation to the relevant digital activity any options or default settings in relation to the relevant digital activity in a way that allows those users or potential users to make informed and effective decisions about those options or settings in their own best interests'.
195. According to the CMA, conduct requirements such as the examples set out above, alongside a choice requirement remedy (potentially through a PCI), could likely apply to Facebook and Google.¹⁴⁷ Following the recommendation of these two interventions by the CMA, Which?, alongside Accent and PJM Economics, conducted research to estimate the value that users of Google and Facebook would place on the ability to have greater control over their data that is used for targeted advertising. The research used a stated preference methodology and assessed the value users placed on greater control over their data across two scenarios. In

¹⁴⁵ CMA, [Online platforms and Digital Advertising market study](#), 2020

¹⁴⁶ Which? [Value of the Choice Requirement Remedy](#), 2021

¹⁴⁷ CMA, [Online platforms and Digital Advertising market study](#), 2020

the first scenario, the participants were not informed of the data collection methods Google and Facebook used for targeted advertising (uninformed scenario) and in the second scenario participants were informed of the data collection methods (informed). The information shown (a proxy for the conduct requirement as outlined above) caused people to express a stronger preference for the privacy-enhanced option. In addition, the information shown had a significant impact on the value consumers placed on their ability to have greater control over their data.

196. Under the informed scenario, the estimated mean value users placed on their ability to have greater control over their data was £1.09 per user per month¹⁴⁸. This compares to the uninformed choice scenario, in which users' mean estimated value is just £0.5. This result supports the CMA's view, that default settings and choice architecture make it difficult for consumers to make an informed choice and consequently users share more data than they might have otherwise decided to¹⁴⁹. This indicates the value to users of having clear, relevant, accurate and accessible information.
197. Taking the estimated mean value users placed on their ability to have greater control over their data, it is assumed that the benefit of the conduct requirement is equal to the difference in estimated user value across the uninformed and informed scenario (£0.59 per user per month). The reason that only the difference in value here is accounted for is because it is assumed that this is the impact of the conduct requirements relating to ensuring consumers can make informed choices. The additional impact is captured under the PCI section. When multiplied across all UK users of both Google and Facebook aged 18+, this returns an estimated annual benefit of **£635m (see Table 24)**.

Table 24: The Benefits of a conduct requirement relating to consumer choices around use of data - Central Scenario (2022 prices)

<i>Difference CRR Value per User</i>	<i>UK Internet users 18+</i>	<i>% of UK internet population that access site</i>	<i>Total estimated annual benefit</i>
A	B	C	D
£7	47,615k	0.96	£635m
X	X	0.87	

Key:

- **A** = Which Report Choice requirement remedy annual value per user (informed minus uninformed). £7 = (£0.59x12)
- **B** = ONS internet user population 16+ - uk population aged 16-17

¹⁴⁸ The findings are based on questionnaire survey results from a representative sample of UK adults 18+.

¹⁴⁹ CMA, [Online platforms and Digital Advertising market study](#), 2020

- **C** = 96% of UK internet users access at least one Google site each month. Facebook's reach is around 87%.
- **D** = Total estimated annual benefit

198. The diagram above outlines the estimation of benefits based on the central results presented in the Which? report. In order to present the impact of altering these assumptions, this IA utilises sensitivity analysis on the CRR value per user, using the upper and lower bounds of the 95% confidence interval provided by Which? in their report.

Table 25: Benefits of a conduct requirement relating to consumer choices around use of data - Sensitivity Analysis - 2022 prices

Scenario	Low	Central	High
Estimated unit benefit (per annum)	£6.5	£7.1	£7.7
Estimated annual benefit	£581m	£635m	£689m

Pro-competition interventions (PCIs)

Choice Screens

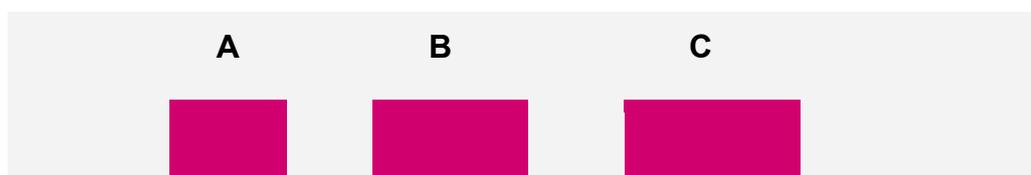
199. According to the CMA online platforms and digital advertising market study, a number of smaller search engines are unable to compete with Google for search default positions because Google has raised the cost of distribution deals to the point that distribution is effectively blocked. The Competition Law Forum said that payments by Google to mobile phone manufacturers to pre-install Google as the default search engine 'effectively elements consumer choice as the power of defaults may nudge consumers into the perception that Google is the only mobile search engine'¹⁵⁰.
200. The CMA outlines several ways in which weak competition in general search may negatively impact consumers. First, the firm with a default position faces weaker incentives to keep improving their services in the interests of consumers, compared to a scenario where they face a stronger competitive threat. Second, the firms with a default position can collect more consumer data (or offer consumers worse terms in return for their data), compared to a scenario where it faces stronger competition. Third, consumers are harmed indirectly by higher prices for other goods and services (i.e. search advertising prices may be raised above competitive levels).
201. The benefit of this for end users has not been quantified. However, it is possible to demonstrate the potential scale. In the CMA online platforms and digital advertising market study, they presented that Google is willing to pay a significant amount to be the default browser on some devices. For example, in 2019 Google paid around £1.2bn for default positions in the UK alone. The majority of this amount was paid to Apple, with the rest being split between Android manufacturers and others.
202. Therefore, default positions are worth at least £1.2bn per annum to Google. This suggests that incumbents are able to derive a significant amount of value from end users as a result of default behaviour. It is therefore reasonable to assume that the removal of default positions, and providing end users with a choice, would bring about a significant level of benefit, likely through a reduction in consumer harms from switching to a competitor, or simply through the value of having a choice.

¹⁵⁰ CMA, [Online platform and digital advertising market study](#) (Appendix H), 2019

Data openness (i.e. the provision of third-party access to data)

203. **Increased quality of services to consumers** - Opening up the wealth of data held by SMS firms, as a result of their large user bases, will create a number of opportunities¹⁵¹. The insights that SMS firms are able to gain from the data they collect from users allows them to tailor their services to individual customers, which is particularly beneficial for advertising-derived revenue. Following a data openness measure, competitors would be able to gain the insights that have so far only been open to large firms. This will allow them to create new products, adjacent markets and increase the overall value that the services within digital markets can bring to consumers.
204. To estimate the value of opening up data sources in digital markets, as above, this can be benchmarked against the TfL open data measure. Deloitte estimated that opening up TfL's data sources has brought economic benefits of £130m per annum. It is assumed that £15m of this benefit, related to Gross Value Added from new firms, is most relevant to digital markets. The large majority of the estimated benefit in this report is linked to time savings for network passengers (£70m - £90m per annum). This has not been taken into account within our quantification of benefits, given the lack of a direct link to a time saving impact as a result of this measure. However, given the uncertainty around how data could be used by new entrants, it is possible that these types of benefits may become relevant in the future.
205. Similarly, to Deloitte's assessment of TFL's open data intervention, it is expected that this type of intervention in digital markets would lead to new business opportunities and have therefore assumed a GVA impact.
206. The £15m figure produced by Deloitte has been adjusted in order to remove the additional costs (e.g. labour) associated with bringing about any GVA, so that only profit is taken into account. To do this, the £15m figure has been multiplied by 0.39, in line with RPC guidance based on ONS data around what proportion of GVA is profit¹⁵². Therefore, it is assumed that this intervention will result in an annual benefit of £6.6m (2022 prices) but this benefit is scaled by the number of users (see diagram). This suggests that the annual benefit for opening up access to Google's data could be £11.2m. The assumption that costs would scale with the number of users is conservative, and is used to capture the extent of costs to SMS firms.
207. In addition to the quantified benefit, it is possible to look at the benefits of previous data openness measures. For example, as outlined in the benefits of interoperability below, Open Banking measures resulted in the creation and expansion of adjacent measures, and significant benefits to consumers.

Table 26: Benefits of implementing a Data Openness PCI (2022 prices)



¹⁵¹ While keeping in line with privacy laws.

¹⁵² RPC, [Other business impact target methodology issues](#), March 2019

$$\text{£6.6m} \times 1.7 = \text{£11.2m}$$

Key:

- **A** = Estimated GVA resulting from TFL's open data measure
- **B** = Scaling factor (the GVA estimate has been scaled according to user numbers). 1.7 = Google user numbers/TFL user numbers.
- **C** = Estimated annual benefit

Interoperability measures

208. **Increased choice / quality of services** - Opening up accessibility to incumbent platforms will increase the functionality of competitors, which could improve the quality of services they are able to offer. This should make them a more viable alternative for consumers that may wish to switch away from an incumbent, whilst still experiencing the features that the incumbent provides. This may result in an improvement in consumer surplus, as quality is improved or maintained, whilst harms such as a high data cost associated with incumbent platforms are diminished.
209. **Creation and expansion of adjacent markets** - In markets where interoperability has been implemented, some of the major benefits have been experienced through the creation and expansion of adjacent markets. For example, through 'Open Banking', significant benefits have been seen through the creation of several money management services, such as Monzo and Revolut¹⁵³. This could happen within digital markets, such as social media where new entrants could provide services for a central social media timeline, or an app for cross-platform messaging¹⁵⁴.

Consumer control over data (Choice Requirement Remedy)

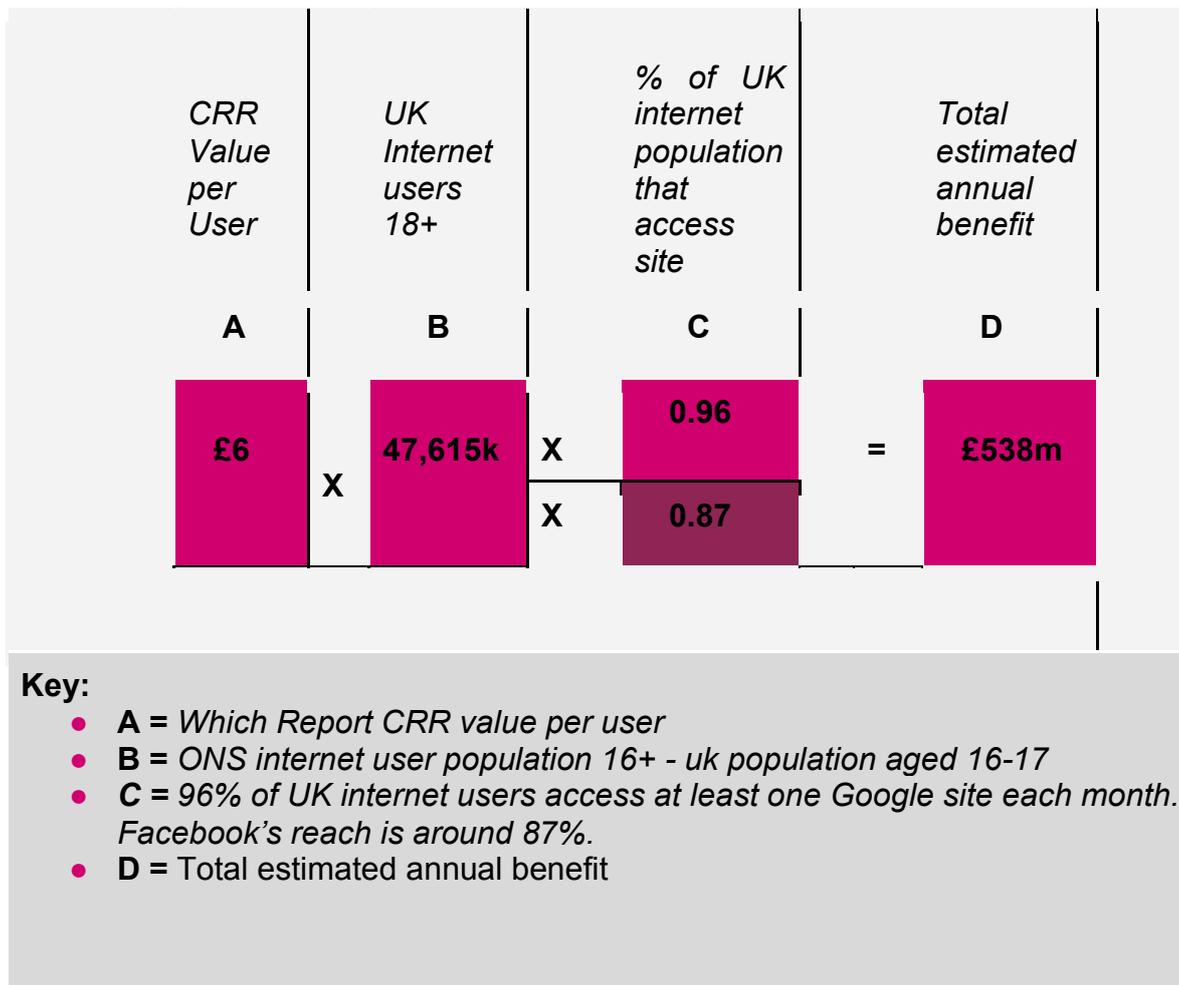
210. **Increased choice** - As outlined above, the DMU may choose to implement a choice requirement remedy in order to increase the control users have over their personal data.
211. Which? carried out research to estimate the potential benefit of a Choice Requirement Remedy, which would give consumers the option to opt out of receiving personalised advertising. They utilised a willingness to pay approach, which estimated that the mean value of the choice requirement remedy to consumers at £0.50 per month, when consumers were 'uninformed' about the ways in which their data is collected and utilised. The value calculated for the 'informed' scenario is outlined above and used to estimate the benefit of a code requirement that provides transparency to consumers. The methodology used to calculate the benefits of the choice requirement remedy PCI is outlined in table 26 below.
212. If the £0.50 per month estimate is multiplied across all of Google and Facebook's users aged 18+ in the UK, then the total benefit provided by the PCI measure alone is estimated as £538m per annum.

Table 27: The Benefits of a choice requirement remedy - Central Scenario (2022)

¹⁵³ It is estimated that Open Banking returns an annual benefit of £12bn for consumers, and £6bn for SME users. Open Banking Implementation Entity, [Consumer Priorities for Open Banking](#)

¹⁵⁴ CMA, [Retail banking market investigation](#), 2016

prices)



213. In order to account for some of the uncertainty around the take up of these measures, and the scale of estimated benefits, this IA has utilised sensitivity analysis around the estimated increase in consumer surplus as a result of increased choices around data, or 'A' in the table above. To do this, the upper and lower bounds of the 95% confidence interval provided in the Which? report has been used.

Table 28: Benefits of a Choice Requirement Remedy - Sensitivity Analysis - 2022 prices

Scenario	Low	Central	High
Estimated unit benefit (per annum)	£5	£6	£7
Estimated annual benefit	£441m	£538m	£635m

Mergers

214. Proportionate and targeted SMS merger requirements would help protect consumers and businesses from harmful mergers by ensuring that the CMA has the transparency of and can efficiently investigate mergers of interest. Through the proposed transparency requirements for SMS mergers the CMA would at an earlier stage become aware of the key information about the transactions made by SMS firms. This may likely result in consumer benefits through more effective mitigation of harmful integration and potentially reduce the costs associated with merger investigations for both businesses and the CMA.
215. Merger control is seen by the Taskforce as the third pillar to the digital regime that can preserve competitive market structures and stop harm before it occurs, providing fast and effective intervention compared to the other tools available. Further to the main benefits of increased competition in digital markets, which is discussed in the main benefits section of the Impact Assessment, this section highlights the additional benefit considerations that need to be taken into account specifically for an SMS merger requirement.
216. While it is difficult to assess what would have happened in the absence of a merger, the CMA estimates that there have been significant financial consumer benefits as a direct result of the merger control activities it undertakes. The direct financial benefits to consumers may include direct reductions in prices to consumers, the value to consumers of improvements in quality, service and information provision following an intervention. Between the financial years 2019/20 and 2020/21, the estimated total direct consumer benefit from their merger control activities was £2.03bn.¹⁵⁵ The benefits from the UK merger regime are dependent on the cases that come to the CMA for assessment as well as the nature of the cases being assessed and the associated benefits can vary significantly year on year. The three-year period was chosen to alleviate the effects of any year-on-year variation.
217. The CMA estimates the benefits to consumers of a specific case by multiplying the turnover of the affected goods and services by the assumed price increase that were avoided due to CMA action. The CMA case team investigating a merger often collects information on affected turnover as part of its evidence-gathering and therefore it is often recalled from the original investigation. To be conservative, the CMA typically applies a narrow definition of the affected turnover by estimating it as the turnover of the directly affected firms. The CMA then aggregates the estimated consumer savings delivered by each case to arrive at the aggregate consumer benefit delivered during the period. The merger benefit figures do not include the wider benefits, such as deterrence. The CMA expects that deterrence effects are also significant.
218. To calculate the benefits per merger intervention, the number of cases in the corresponding aggregated benefit figure is divided by the number of merger cases that resulted in interventions. For mergers, interventions are classed as cases which resulted in remedies in lieu, mergers that are abandoned, and mergers amended or prohibited by the CMA at Phase 2. For this period 43 cases were intervened in, the intervention rate of 28%.¹⁵⁶ As a result, the estimated benefit per merger intervention is £47.2m.
219. An element of this benefit would be benefits to consumers from lower costs. This would effectively be a transfer from businesses due to excess profits to consumers. However, it is difficult to disentangle the price impact from the CMA's aggregated consumer benefit estimate away from the benefits to all businesses from stronger levels of competition. Given this difficulty, we have not regarded these benefits as a transfer within this analysis. This approach is strengthened by the reality that the CMA will only intervene in a merger found to be anti-

¹⁵⁵ CMA Impact Assessment 2021 to 22, Competition and Markets Authority (2022) -

<https://www.gov.uk/government/publications/cma-impact-assessment-2021-to-2022/impact-assessment-2021-to-2022>

¹⁵⁶ CMA, [Merger inquiry outcome statistics](#), 2014

competitive. This means any foregone profits would have arisen from increased market power as opposed to healthy business practices.

220. This benefit is applied to all additional interventions modelled as a result of the additional SMS merger requirements. The government understands that each merger review is unique. The anticipated benefits of any given intervention depend on many factors unique to that case. Given the large scale of many of the digital transactions this may not be realistic to assume it is consistent, however without the ability to isolate digital intervention impacts (as there has been insufficient historic intervention in digital cases) any revision to this estimate was thought to be potentially misleading.
221. To estimate the number of interventions that there may be as a result of the additional merger requirements, the intervention rate of 28% was used as a base against the additional envisaged phase 1 investigations (0-8 per year).¹⁵⁷ The resulting additional intervention figures were between 0.0 and 2.24 SMS mergers per year.

Table 29 - Estimated annual benefits (merger regime)

Scenario		Low	Central	High
Assumed	SMS merger interventions	0.00	0.98	2.24
Estimated benefit	annual	£0.0m	£46.3m	£105.7m

222. It should be noted that the direct merger benefit estimates are highly sensitive to the intervention rate assumption. As an example, if a lower rate of intervention was used there would be substantially lower associated benefits (e.g. 25% of the current CMA intervention rate would result in 0.00 - 0.56 interventions per year and resulting benefits of £0.0m to £26.4m per year).

Indirect benefits from increased competitive pressure

223. Several of the regime’s powers and functions are expected to tackle the incumbency advantage of SMS firms (e.g. bargaining power), reduce barriers to entry, and increase competition in and for the market. Under increased competitive pressure, it is expected that incumbents would be driven to change their behaviour to compete more intensely with rivals and new entrants. With their position in, and share of, the market under greater threat, incumbent firms would have greater incentive to improve their offering to consumers and not behave in a way that harms them. Hence, these competitive pressures are expected to naturally drive the market towards better consumer outcomes.
224. Some of the expected improvements in consumer outcomes stemming from improved competitive conditions are detailed below:
- **Increased economic activity** - Economic theory suggests that total output is higher in more competitive markets.¹⁵⁸ Therefore, an erosion of barriers to entry, increasing competition in and for the market, should increase output to the benefit of businesses, end users, and the wider economy. As this increased output may come from foreign-owned digital competitors, this does not necessarily mean UK production would increase, but UK consumption would.
 - **Increased choice** - Certain market characteristics and anti-competitive behaviour hinder entry and expansion from potential new competitors in digital markets. SMS

¹⁵⁷ With a central estimate of 3.5 additional phase 1 investigations per year, as discussed earlier in the Impact Assessment.

¹⁵⁸ [CMA Regulation and Competition report](#) (2020)

firms also discontinue their own innovative product developments in favour of those they have acquired. Both of these likely reduce consumer choice in the long term.¹⁵⁹ Interventions that erode barriers to entry, encourage expansion, and facilitate greater market entry may therefore lead to increases in the choice and variety of services available to consumers.¹⁶⁰

- **Increased quality** - New entrants may offer higher quality products, and/or incumbents may be driven to improve quality in order to retain market share.¹⁶¹ This is particularly important in digital markets where services are not monetised.¹⁶²
- **Reduced prices** - New entrants and existing competitors might offer a lower priced, but equally good service, possibly driving incumbents to also compete on price in order to retain their market share. Given the prevalence of services that are free at the point of consumption, reduced prices may be seen on the business user side of the market, and then passed through to end users in the prices of consumer goods.
- **Reduced costs to business users associated with poor terms** - Business users of online platforms can be strongly dependent on one platform. IFF's Platform Business Survey, in 2021, found that 1 in 5 UK retailers, using third party digital e-commerce platforms, relied on one platform for the majority of their turnover. Around 1 in 3 respondents to the survey disagreed that they could easily switch to another platform if the terms and conditions on their main platform changed to their detriment.¹⁶³ In a more competitive market, with more viable alternative providers, business users would be less willing to accept poor terms, or otherwise endure unfair treatment, meaning platforms would be incentivised to offer them better terms and treat them more fairly in order to retain market share.
- **Improved control over data** - Currently, end users must typically exchange their personal data in order to access certain digital services. A more competitive market may result in alternative services differentiating themselves from incumbents by lowering 'data costs' (i.e. requiring less data from end users or offering greater choice over how much data they provide). This may drive incumbent firms to reduce their own 'data costs' in order to retain their market share.¹⁶⁴
- **Increased investment** - A stronger regulatory environment may reduce the cost of doing business for smaller businesses, particularly those dependent on SMS firms (e.g. SME retailers on large digital platforms). A protected and certain regulatory environment, as well as more competitive markets, may lead to increased investment, both domestically and via inflows from abroad.

Case Study: Potential Impacts in digital advertising markets

Digital advertising could be one of the digital markets impacted by the new pro-competition regime. The CMA Market Study, which presents evidence on digital advertising markets, helps to illustrate the types of expected costs and benefits of the regulation in a specific digital market.

Total economic welfare vs consumer surplus: As outlined above, some impacts in digital advertising markets are likely to be transfers from SMS firms (e.g. reduced profits) to consumers (e.g. lower prices). Given the direction of transfers, as per the objectives of the regime, the resulting increased consumer surplus is viewed as beneficial overall. It can also be argued that the current allocation in the market has given rise to a deadweight welfare loss. If the DMU's actions increase output and thus lead to a reduction in this deadweight loss, relative to the counterfactual, this would constitute a net gain in total welfare.

¹⁵⁹ CMA, [Online platforms and digital advertising](#), July 2020

¹⁶⁰ This assumes that new entrants will offer heterogeneous services.

¹⁶¹ This impact assumes that firms will choose to compete on quality rather than, or in addition to, some other aspect of their offering (e.g. price).

¹⁶² For example, users don't have to pay money to join Facebook.

¹⁶³ IFF Research, [Retailers' Experience of Using Digital Platforms Survey](#) conducted on behalf of BEIS. 2021.

¹⁶⁴ This impact assumes that end users are aware of the data they provide when using online services, would prefer to provide less data, and would be willing to switch to alternative platforms to do so if given the opportunity.

Changes in advertising inventory - multidirectional impacts: Like many other digital markets, digital advertising markets are multi-sided and complex, and the proposed interventions could have impacts on multiple sides of the markets.

Fewer ads for end users - Currently, incumbent firms are able to push a large volume of advertisements ('ads') to their end users given a lack of attractive alternatives. As a result of increased competition and threat of market entry, stemming from the DMU's activities, firms may feel under increased competitive pressure and decide to reduce ad load to attract or retain customers (a form of non-price competition). Decreased ad exposure would constitute an improved outcome for end users in these markets.¹⁶⁵

Potential for increased advertising prices - On the other hand, a reduction in the supply of advertising inventory may lead to an increase in the purchasing price of the remaining advertising space. This cost would be borne by advertisers (i.e. businesses on the opposite side of the market to end users) in the first instance, and subsequently by end consumers through increased prices of consumer goods throughout the economy. As outlined in the 'Case for change' section above, the CMA cites empirical evidence that up to 100% of cost increases can be passed through to end consumers.¹⁶⁶

Potential for decreased advertising prices - This price increase on the business-side of the market may be offset/outweighed if digital advertising providers respond to greater contestability by competing on price (i.e. offering lower prices to attract or retain advertisers). Just as cost increases are often passed through to end consumers, it can be assumed that in competitive markets, a reduction in costs to advertisers may be passed on to end consumers through a reduction in the prices of consumer goods.

Net impact - It is not clear which of these multidirectional impacts would prevail, as firms' behaviour is uncertain. However, it's expected that the DMU's actions will encourage multi-homing and switching. For example, a PCI that would give competitors greater access to data held by SMS firms would enable competitors to offer a more similar quality of service (e.g. tailoring of advertising) that is more attractive to end users and therefore to advertisers. So, even if each firm were to reduce its ad load, with greater alternative services on which to advertise, it is expected that the potential negative impact on the total supply of high-quality advertising inventory available to advertisers would not be large enough to result in a price increase across the market. Therefore, it is expected that the positive impacts arising from greater competitive pressure, such as reduced ad load (higher quality) and lower advertising prices, would likely prevail.

Increased advertising revenue to the press sector (positive externality): As mentioned above, the CMA market study suggests that digital intermediaries currently capture at least 35% of the value of advertising bought from newspapers and other content. The erosion of the incumbents' market power may alter the balance of bargaining power between parties. This may lead to the renegotiation of advertising revenue share, or may mean alternative intermediaries place greater competitive pressure on incumbents' prices. This would result in publishers receiving a greater share of advertising revenue for ads served to their users.

¹⁶⁵ This assumes end users consider ad load when making consumption decisions, would switch to alternative services on the basis of ad load, and therefore that firms are likely to compete on this aspect. The Government believes this is a reasonable assumption, since end users have both stated their preference for fewer ads, as '42% of online adults dislike all online advertising' (Ofcom Adults' Media Use & Attitudes Report, 2020), and revealed it by paying for ad-free experiences on platforms like Spotify and YouTube.

¹⁶⁶ See footnote 53 on cost pass-through.

Section 9 - Additional Analysis

9A - Analysis of the impact on small and micro businesses

225. Across all shortlisted policy options, small and micro-sized businesses are out of scope of the proposed regulation. The scope of this regulatory regime would be SMS firms, and the DMU would use the SMS designation process to capture only the firms with, in respect of a digital activity, substantial and entrenched market power and a position of strategic significance. This is expected to return greater benefits to consumers without disproportionately creating a burden on smaller digital firms.
226. In line with RPC guidance, in this section small businesses are defined as those employing between 10 and 49 FTE and micro businesses as those employing between 1 and 9 FTE. Under the preferred policy option, a firm could not be designated if it has UK revenue of <£1 billion or global revenue of <£25 billion. To this end, the SMS designation process would, by design, only capture the largest firms within digital markets. Therefore, while the above criteria do not account for the number of FTE, it is not expected that any business with a UK revenue of at least £1bn to have less than 50 FTE. Consequently, it is not expected that the direct costs associated with this regime will fall on small or micro businesses.

Indirect impacts

227. Whilst small and micro businesses are out of scope of this regime, they may be indirectly affected by the regime. For instance, there may be some 'pass through' of regulatory impacts to smaller businesses and these potential impacts have been considered below. The consideration of impacts on SMBs has been split into the following sections: Conduct requirements, PCIs and Mergers. The impact of each aspect of the regime on SMBs is considered on its own. Overall, it is expected that the benefits for SMBs will outweigh the costs under the preferred option.

Conduct requirements

228. Due to the high-level nature of the objectives and categories of conduct requirements, it is hard to assess the potential indirect impacts of the conduct requirements. That said, the aim of the conduct requirements is to prevent exploitative and exclusionary conduct and informed and effective choices, which means (i) smaller businesses that directly partner with SMS firms may benefit from fairer contracts; and (ii) smaller businesses may benefit from better access to consumers. On the other hand, an unintended consequence may be that compliance costs are indirectly passed onto smaller businesses or end users through higher prices. However, it is important to consider the pro-competitive nature of the regime, which should limit the ability for SMS firms to pass costs onto smaller businesses.

PCIs

Choice screens

229. As outlined in the cost section above, SMS firms may incur a small cost through the implementation of a choice screen, however, this is unlikely to be significant relative to their revenue and therefore any pass through in terms of cost is likely to be negligible. In contrast, the tariffs charged by large search engines to smaller firms (i.e. firms using search engines to advertise) is currently higher than necessary given the presence of market power, as outlined by the investigation of price-bid ratios in the CMA online platform and digital advertising market

study. Therefore, these prices may come down as a result of greater competition (i.e. a choice screen will challenge search engines with default positions by presenting users with alternative options and this additional competitive pressure may incentivise large incumbent firms to lower prices in an attempt to encourage advertisers to their platform).

Data openness

230. A data openness measure may be significantly costlier to implement compared to a choice screen feature. This means that there is a greater probability that some of the cost will be passed onto end users or smaller businesses. On the other hand, there is potential for significant benefits too. The TFL open data and digital partnership measure highlights the potential direct and indirect benefits that may arise from greater data openness¹⁶⁷. For instance, greater data openness may significantly reduce barriers to entry into digital markets and consequently lead to the creation of new small/micro businesses. It may also enable small businesses to improve market insights and or data-driven services.

Interoperability

231. As it stands, in markets that are developed and stabilised, incumbent platforms only have the incentive to interoperate to the extent that it benefits them. In other words, interoperability features are often extended to other firms only if their products complement, rather than substitute, the incumbent business' services. This leads to lesser competition in the market. As a result, smaller businesses that are looking to offer a comparable service may be prevented from interconnecting some of their services with larger platforms which limits their ability to compete on the market. For example, Zoom allows Skype for Business users to join a virtual meeting (video conferencing services), but the reverse is not possible. Therefore, greater interoperability in digital markets has the potential to benefit smaller competitors by (i) giving them more opportunity to compete and (ii) improve their services.

232. A risk associated with interoperability measures is that the cost of implementation to incumbent firms is passed onto end users or smaller businesses. Furthermore, any measure that results in a loss of revenue for SMS firms may pass through to smaller business partners.

Choice requirement remedy

233. Similarly, to the choice screen measure, SMS firms will incur a small cost to develop their software in order to facilitate consumers making a choice regarding the use of their data for the purpose of personalised advertising. Given the costs are likely to be small any passing on of the cost is likely to be negligible.

234. The choice requirement remedy may result in an increase in the number of users opting out of personalised advertising and in return this may reduce the amount of data passed onto both online platforms and advertisers (i.e. firms using online platforms to market their product/services). Some of these firms may also be small or micro businesses and the loss of this data may result in a reduction in sales revenue. Alternatively, these companies may be able to incentivise consumers to share their data by offering them a financial reward (while this benefits consumers this may lead to additional costs for businesses).

Mergers

235. With regards to the SMS merger transparency requirements, the obligation to report will be on the SMS designated firm rather than the firm that is being acquired. There will be no direct merger compliance costs for small or medium sized businesses.

236. Having said this, some small and medium businesses may face additional processes if the SMS firm needs to report to the CMA, prior to them completing the transaction. It is believed

¹⁶⁷ Deloitte, [Assessing the value of TFL's open data and digital partnerships](#), July 2017

that this is partially mitigated, however, through the use of proportionate thresholds before the reporting requirements are engaged. It is considered that as the reporting requirements will be targeted at larger transactions that are undertaken by the SMS firms, these would inherently be skewed to larger firms. At a threshold of £25m, 11-25% of the transactions involving large digital firms would be excluded from the reporting requirement.¹⁶⁸ The smaller holdings that are excluded would tend to be for smaller firms in their infancy. This threshold level was specifically chosen to balance increased transparency against additional burdens to smaller transactions. These mergers would likely have greater uncertainty as to whether they would lead to a substantial lessening of competition as a result of the merger.

Conclusion

237. As it stands, small and micro businesses are directly exempt from the proposed regulation. Overall, while there might be some pass-through in additional costs, these costs are unlikely to be significant (see Table 30 below). Furthermore, as described above SMBs will likely benefit in a number of ways: conduct requirements will be used to ensure SMBs are receiving fair contracts, PCI interventions will be used to reduce barriers to entry and give SMBs better access to markets; and an overall improvement in competition may reduce costs for SMBs.
238. Furthermore, it is worth remembering that evidence of the potential impacts will have to be considered and evaluated at key decision points before implementation, the relative costs and benefits of potential interventions will be considered by the DMU and a business impact target assessment will be undertaken. In addition to this, interventions will be monitored by the DMU to ensure interventions are effective.
239. The indirect costs to SMBs have been estimated to give a sense of the scale of potential cost.¹⁶⁹ Table 30 highlights the average cost to small and micro businesses across the 10-year appraisal period. In order to estimate the potential impact, it is assumed that a proportion of the overall business costs will be passed through to small and micro businesses from SMS firms. In a worst-case scenario, it is estimated that up to 35% of the additional cost to SMS firms will be passed onto SMBs. This assumption is based on the CMA online platforms market study which shows that, for the same search queries (i.e. holding quality constant), Google has higher prices than Bing on average by 35%¹⁷⁰. This highlights Google's market power and its ability to charge businesses significantly more than its competitors. It should be noted, however, that the primary aim of the proposed legislation is to improve competition, which would limit SMS firms' ability to pass costs onto SMBs or users. To this end, while the worst-case scenario is presented here, we do not believe this scenario is likely. To account for uncertainty, three different scenarios are presented in table 29. The overall cost has been divided across the estimated number of small and micro businesses that operate online (i.e. sell through a website)¹⁷¹ in order to estimate the average cost per firm.

Table 30: Estimated costs to small and micro businesses across the 10-year appraisal period (2022 prices, undiscounted)

	Alternative	Alternative	Worst case
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¹⁶⁸ Based on BEIS analysis of Merger Market data for Meta (Facebook), Alphabet, Microsoft, Apple and Amazon, which has transaction value information.

¹⁶⁹ To note, this is not seen as a realistic scenario. The scenarios above have been constructed to give a sense of the potential cost. In practice, the regime will promote 'fair trading'.

¹⁷⁰ CMA, [Online platforms and digital advertising](#), July 2020

¹⁷¹ According to [ONS E-commerce and ICT activity data](#) 9.1% of micro businesses and 25% small businesses made website sales in 2019 (we assume these proportions remain constant throughout the appraisal period). According to business population estimates, there were 1,162,155 micro businesses and 210,550 small businesses in the UK at the start of 2021 (we assume these estimates remain constant across the appraisal period). Using this data, we estimate the number of small and micro businesses that may be indirectly affected by multiplying the proportions above by the business population estimates.

	Scenario	scenario	
Total estimated business impact	£1,294m	£1,294m	£1,294m
Estimated % pass through to SMBs¹⁷²	10%	20%	35%
Estimated number of SMBs	158,394	158,394	158,394
Total cost to SMBs	£130m	£259m	£454m
Cost per firm	£819	£1,639	£2,868

9B - Analysis of potential impacts on trade and investment

240. The assessment of the trade and investment impacts is not specific to any one policy option, but explores the impacts arising from a new pro-competition regime that successfully improves competitive conditions in digital markets and provides a more certain and transparent regulatory environment. The potential implications of convergent, versus divergent, international regulatory regimes are also considered. Analysts at the Department of International Trade have been engaged in the development of this section.
241. Regardless of the policy option being implemented, the DMU will be required to comply with any international obligations which have been agreed to in the UK's FTA programme, including WTO rules DIT have confirmed that HMG will not need to notify the WTO of this regulation.

More competitive digital markets and regulatory transparency

242. A new pro-competition regime would create a regulatory environment in which digital businesses and their customers (e.g. online retailers or advertisers), are better protected from exploitative or exclusionary behaviours. In addition, the DMU's transparent and participative approach to regulation should help create regulatory certainty.
243. Notably, the UK's pro-competition regime will apply to all firms that are designated with 'Strategic Market Status' by the DMU based on robust, evidence-based assessment. As with existing competition law, the location a firm is incorporated in will not impact the decision of the DMU as to whether to designate a firm with SMS. As a result, the pro-competition regime will apply equally to domestic and foreign businesses with SMS.
244. A possible consequence of the pro-competition regime is a fall in SMS firms' investment in the UK, as they will bear most of the business costs of the new pro-competition regime. This may cause a growth in services provided by non-SMS firms, which may step in to replace services currently provided by SMS firms. However, the likelihood of disinvestment by SMS firms is low given that pro-competition regulations would still apply to SMS firms regardless of their physical operations in the UK. A risk that has emerged in other jurisdictions is that SMS firms instead decide to offer different services and/or lower functionality to UK consumers in response to the new regulations. For example, the dispute between Facebook and the Australian ACCC regarding payments to news publishers, where Facebook temporarily blocked Australian users from sharing or viewing news content on its platform.¹⁷³ It is believed that the likelihood of this occurring is relatively low, given the open, transparent, and

¹⁷² CMA, [Online platforms and digital advertising](#), July 2020

¹⁷³ Sky News, [Why has Facebook blocked news in Australia and what does it mean for the rest of the world?](#), 2021.

participative approach the DMU will take to regulation, including consultation with affected parties.

Regulatory coherence and divergence

245. As introduced in the Background section of this IA, there is significant international momentum towards digital markets reform. As such, many countries are seeking to develop their own policy and regulatory approaches to digital competition, including antitrust initiatives underway in the US and new EU legislation, the Digital Markets Act proposals.¹⁷⁴ A number of countries have already introduced new legislation to promote competition in digital markets, including Germany, Japan, Australia and the Republic of Korea.
246. In other regulated markets, there is a concern that global regulatory divergence or fragmentation¹⁷⁵ can lead to greater trade friction - especially for smaller firms - as operating in multiple jurisdictions can impose a higher compliance burden¹⁷⁶. However, the UK pro-competition regime will be targeted towards only a small subset of digital companies designated as having ‘Strategic Market Status’. Only very large firms with, in respect of a digital activity, ‘substantial and entrenched’ market power and a position of strategic significance, will be subject to regulation through the pro-competition regime. Therefore, the risks associated with regulatory fragmentation and the creation of new challenges for small firms are relatively low.
247. Following conversations with a range of diverse stakeholders, the Government understands that divergence can also be a source of strategic advantage in trade and investment. For example, stakeholders have welcomed the flexibility of the UK regime in contrast with digital markets regulation proposed in other jurisdictions. Given the competitive advantages, it is expected that the implementation of the UK regime will help cultivate a more attractive business environment and lead to an increase in trade and inward investment. As businesses will have greater clarity of regulatory expectations in digital markets in the UK, they will be able to adapt their behaviours to the benefit of the sectors and customers that rely on these firms. This improved certainty should provide a more attractive environment for businesses who will want to invest in the UK market, helping to grow our inward trade and investment.
248. The UK may be developing and implementing our pro-competition regime following the EU’s work to enact the Digital Markets Act. It is important that the UK seeks to develop a regime where our objectives for promoting competition in digital markets are coherent with other jurisdictions and the Government continues to advocate for a coherent global approach to the regulation of digital markets. The UK is aiming, where possible, to pursue international regulatory cohesion, taking into account the effects of broader digital markets regulation such as international transfers regime, data protection reform and online safety.
249. Regulatory coherence does not mean that the practical approach to promoting competition will not differ between jurisdictions. The extent of regulatory coherence will depend at least in part on international engagement and the appropriate coordination mechanisms being in place.¹⁷⁷ Within the regime itself, the Government is considering the appropriate frameworks

¹⁷⁴ Other national efforts to tackle digital competition include: the establishment of the Headquarters for Digital Market Competition in Japan; recent German competition legislation; and a new digital unit being set up in the French competition authority.

¹⁷⁵ Regulatory fragmentation refers to disparities in the implementation of regulation, and regulatory reform initiatives, by individual jurisdictions, which typically raise the regulatory burden (cost) faced by firms.

¹⁷⁶ OECD. [Policy Brief: International Regulatory Co-operation](#), 2018.

¹⁷⁷ Government believes that international regulatory convergence in the long-term is a reasonable assumption. This is not only as there is expected to be a degree of international engagement and coordination (e.g. already ongoing G7 work), as regulators understand the competition issues in global digital markets extend to jurisdictions around the world, but also given the similarity in conclusions of reports and proposals internationally. For example:

- The US House Judiciary Subcommittee on Antitrust’s Investigation of Competition in Digital Markets report proposed a series of measures (similar to examples of PCI measures suggested by the Digital Markets Taskforce in the UK), including interoperability and open access to revive antitrust enforcement and restore competition.

for the DMU to share information with regulators in other jurisdictions to support regulatory coherence. The UK has also been promoting the value of regulatory alignment through multilateral fora like the G7 as well as bilateral engagement with like-minded nations such as the USA, EU member states, the Republic of Korea and others. Ultimately, greater global regulatory coherence will help improve the efficiency and effectiveness of digital markets regulation, including helping to facilitate international enforcement efforts.

9C - Equalities Impact Assessment

250. The Department is required to comply with the public-sector equality duty (PSED) set out in the Equality Act 2010 (“the Act”). The PSED requires the Minister to have due regard to the need to advance equality of opportunity, hinder discrimination and foster good relations between those with and without certain protected characteristics. This due regard is taken to eliminate unlawful discrimination and to tackle prejudice and promote understanding. The characteristics that are protected by the Act are: age, disability, gender reassignment, marriage or civil partnership (in employment only), pregnancy and maternity, race, religion or belief, sex and sexual orientation.¹⁷⁸
251. The powers given to the DMU under the preferred option to intervene in digital markets would directly impact businesses, rather than end users. Large businesses designated with SMS would be subject to regulation under the regime, and there should be no indirect consequences for those with specific protected characteristics through this. However, consumers would benefit indirectly from the outcomes of this regulation. In turn, those who use digital markets more will benefit the most from a reduction in harm and improved consumer outcomes. For example, data from the Office for National Statistics (ONS) on digital exclusion in the UK shows that males, 16-24-year-olds, non-disabled people, and those of Chinese ethnicity are the highest users of digital services.¹⁷⁹ Therefore it could be argued that these groups may see the greatest benefits from DMU interventions, compared to populations that relatively use digital services less. However, aside from this ONS data, there is a lack of available evidence to reliably support this assessment.
252. The actions of the DMU have the opportunity to interact with the three key aims of the PSED¹⁸⁰. Although consumers with specific protected characteristics are not directly in scope of the DMU’s activities, improved competition in markets as a result of pro-competitive interventions may open the market up to previously excluded groups. For example, internet non-use is higher for those aged 75+, as well as those with a disability.¹⁸¹ Previously excluded groups such as these may indirectly benefit from the DMU’s regulation.
253. The matters considered in this Impact Assessment do not raise any issues relevant to the public sector equality duty under section 149(1) Equality Act 2010 because the policy does not discriminate or unjustly favour any person or group of people based on their protected characteristics.

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- The EU’s proposal for the Digital Markets Act includes a list of obligations, akin to PCI-style remedies and categories of conduct requirements, for firms designated as ‘gatekeepers’ to abide by. This includes obligations for interoperability, data openness and the prevention of exploitative practices.
 - The Draft Act on Digitalisation of German Competition by the Ministry of Economics and Energy has enhanced the Bundeskartellamt’s powers to impose interim measures and introduce a code of conduct.

¹⁷⁸ HM Government, [Discrimination: your rights](#).

¹⁷⁹ ONS, [Exploring the UK’s digital divide](#), 2019.

¹⁸⁰ The 3 key aims are: to eliminate unlawful discrimination, harassment and victimisation and other conduct prohibited by the Act, to advance equality of opportunity between people who share a protected characteristic and those who do not, and to foster good relations between people who share a protected characteristic and those who do not.

¹⁸¹ ONS, [Exploring the UK’s digital divide](#), 2019.

9D - Assessment of impact on innovation

Innovation Impacts

254. In general, an increase in competition in and for markets (contestability) would be expected to increase innovation. As outlined in the 'Case for change' section above, there is some anecdotal evidence that innovation in many digital markets has been stifled due to a lack of competition, a lack of successful new market entry, and the anticompetitive conduct of incumbents. It is the CMA's expectation that increased innovation would be the greatest benefit of a new regulatory regime for these markets.
255. In general, an increase in the amount of innovation in digital markets relative to the counterfactual can be expected to increase consumer choice and the quality of products/services in the long-run, and subsequently lead to higher consumer welfare.¹⁸² Given the interdependence of many other industries on digital markets (e.g. retailers on digital marketplaces, advertisers from various sectors on digital advertising markets, app developers on app stores), the benefits of increased innovation might also spill over into adjacent markets.
256. However, as presented in the final report of The University of East Anglia Centre for Competition Policy's (UEA CCP) research, on behalf of BEIS, into competition and innovation in digital markets,¹⁸³ the relationship between competition and innovation in digital markets is not always as straightforward as has been empirically found in more traditional markets. Empirical evidence is relatively limited, and the impacts of pro-competitive regulation on innovation may depend on complex, market-specific factors.
257. Hence, while the Government expects the overall outcome of greater competition would be to boost innovation, there may be some countervailing risks to innovation as a result of the DMU's actions, which is outlined in this dedicated subsection.
258. The institutional design of the DMU, and the pro-competition regime it will implement, would aim to guard against any negative impacts on innovation, and to evaluate the expected net impact on innovation when deciding on specific interventions. However, the multiple complex incentives at play, and limited evidence of the impacts these - mostly novel - pro-competition remedies would have on innovation in digital markets, mean unintended or unforeseen consequences are a potential risk.

Innovation Costs

259. **Potential for reduced innovation by SMS firms (reduced profit incentive)** - Supernormal profits¹⁸⁴ can often be the reward for 'winning' a market, and can therefore be the motive for innovation.¹⁸⁵ Any regulatory activities that boost competition and so indirectly reduce the ability for SMS firms to earn supernormal profits in the next period, could risk reducing the incentive to innovate in the current period. For example, Google spent approximately 15% of its revenue on R&D in 2020. There is a risk that this may decrease if Google believes the reward for this R&D is lower as a result of increased competition (i.e. with a reduced profit incentive).¹⁸⁶

¹⁸² This section predominantly refers to product innovations, resulting in new and higher quality products for consumers, rather than process innovations (innovations behind the scenes of a firm that increase productivity and thus may lead to lower prices). However, many of the impacts may also extend to process innovation.

¹⁸³ Deller, Doan, Mariuzzo, [Competition and innovation in digital markets](#). 2021. Report by University of East Anglia Centre for Competition Policy on behalf of BEIS. Henceforth 'UEA CCP Innovation research. 2021.'

¹⁸⁴ Profit of a firm over and above what provides its owners with a normal return to capital.

¹⁸⁵ UEA [CCP Innovation research](#). 2021.

¹⁸⁶ Ibid.

260. **Potential for reduced innovation by new entrants ('damaged' incentives)** - The erosion of an SMS firm's supernormal profits, by virtue of an increase in competition, may also risk reducing innovation incentives for new entrants:
- While the probability of an entrant 'winning' the market or reaching a more sustainable position may be higher in a more contestable market, the probability of the successful entrant itself then being deposed from that position is also higher, reducing the potential reward for innovative entry.¹⁸⁷ At a global level, foreign firms may be discouraged from expanding into UK markets as a result of the new regime. This may be significant as currently, the globalised nature of digital markets means that a significant number of firms, including many of the most powerful firms, are based outside of the UK.
 - Incumbents in one market can often leverage their position to enter another. Sometimes, this type of market entry can provide a healthy disruptive force to other markets. If measures (e.g. PCIs) place constraints on this type of leveraging, or otherwise reduce the incentives for firms to disrupt other markets, this could negatively impact innovation.
 - The prospect of being acquired by a dominant firm can encourage new entrants to invest in a given market. Firms may be discouraged to enter or grow if their perceived exit routes (e.g. being purchased by a large digital firm) are restricted by increased scrutiny and/or fear of CMA intervention. This may also limit access to sufficient funding to reach the scale needed to challenge the incumbents. In these situations, consumer choice, quality and consequently consumer welfare could be harmed.
261. **Potential for reduced innovation by SMS firms ('free rider' effect)** - Some measures might require SMS firms to provide competitors with access to resources they have developed or amassed through innovation. The SMS firm would be less able to exclusively appropriate the benefits of their own resource/innovation. As competitors would be able to benefit from it without investing ('free-ride'), the SMS firm may have a reduced incentive to further develop these resources in the future, or to develop new innovations at all.
262. For example, a PCI measure might mandate that an SMS firm open up Application Programming Interface (API) access to its service to allow other services to interoperate with it. If other services are able to interoperate with, and therefore benefit from, this feature without having to invest in developing it, the SMS firm may be less inclined to improve that feature.
263. It is not expected that these potential countervailing effects on innovation outlined above will outweigh the benefits outlined below. The procedural safeguards built into the regime are expected to ensure the DMU weighs up all potential costs and benefits, including innovation effects, and intervene only where the overall benefits outweigh the costs.

Innovation Benefits

264. **Increased innovation (competitive pressure on SMS firms)** - Literature suggests that incumbent firms in digital markets innovate less than they would under more competitive conditions. An erosion of their market power should result in greater competition within the market. This may be seen through increased innovation by SMS firms in order to retain their market share. For example, the UEA CCP's research showed that Google appeared to innovate more following Bing's introduction in 2009.¹⁸⁸
265. Increased transparency of mergers involving SMS firms could also lead to increased innovation by the SMS firms if it alters their business models and they invest more on 'in-

¹⁸⁷ Ibid.

¹⁸⁸ UEA [CCP Innovation research](#). 2021.

house' innovation rather than undertaking 'reverse killer acquisitions'.¹⁸⁹ Without the ability to reduce competition and remove future rivals, it is not expected that the large digital firms will increase their R&D activities in order to ensure they further develop products and services to attract and retain customers and not fall behind. It is important to note though that there may be opportunity costs from R&D resource reallocation if the resources are diverted from other productive developments.

266. **Increased innovation (new entrants)** - Evidence suggests that the anti-competitive behaviour of incumbents stifles the potential for innovation by new entrants.¹⁹⁰ The presence of large digital firms in market segments has also been found to harm start-up formation and venture capital funding, creating investment 'kill zones'.¹⁹¹ ¹⁹² Additional evidence suggests that some M&A could be undertaken with the rationale of eliminating future innovative competitors, who may then be shut down.¹⁹³ Interventions that lower barriers to entry should allow for more successful entry and expansion by innovative competitors. The UEA CCP research cites evidence that the same quantity of R&D expenditure spread over many firms may deliver greater innovation outputs than if it was concentrated in a single large firm, holding all other factors constant.¹⁹⁴
267. Specific interventions to directly tackle exclusionary behaviour may also increase successful entry and expansion, and consequently the level of innovation. For example, as outlined in the 'Case for change' section above, following the US Department of Justice filing an antitrust lawsuit against Google in relation to revenue sharing agreements it used to acquire default positions on Apple devices, Apple has announced intentions to develop its own innovation in the general search market.¹⁹⁵ Active merger control can also help to prevent excessive market power being gained by a small number of firms which could make the markets more attractive to investors of other smaller firms active in that market.
268. **'Better' innovation (disruptive or breakthrough not complementary or incremental)** - There is some evidence that the presence and actions of large powerful firms in concentrated markets can impact not only the level, but also the direction, of innovation. Innovation can be distorted as new entrants are encouraged to invest in incremental and/or complementary innovations, rather than competing head-to-head with powerful firms by introducing disruptive/breakthrough innovations.¹⁹⁶ ¹⁹⁷
269. Historically, disruptive, breakthrough innovations have delivered the most noticeable improvements in end users' lives, and have sometimes transformed or created new markets. For example, breakthrough innovations in digital markets often disrupt existing traditional markets, such as the taxi and hotel markets,¹⁹⁸ while price comparison websites have returned benefits to consumers across markets.

¹⁸⁹ 'Reverse killer acquisitions' describe acquisitions, with the intention of adopting the target firm's innovations. These are considered detrimental to competition as the acquirer 'kills' its own organic innovation in favour of absorbing a developed technology, depriving consumers of potential future competition between two innovative services.

¹⁹⁰ CMA Market Study into digital advertising markets.

¹⁹¹ UEA [CCP Innovation research](#). 2021.

¹⁹² Kamepalli, S. K., Rajan, R., & Zingales, L. (2020). [Kill Zone. NBER working paper 27146](#).

¹⁹³ For example, Facebook has acquired and then shut down four other social networks, including Lightbox, a London-based photo sharing start-up. Tim Wu, Stuart A. Thompson. The New York Times (2019). [The roots of Big Tech run disturbingly deep](#).

¹⁹⁴ Cohen, W. Fifty Years of Empirical Studies of Innovative Activity and Performance. 2010. Via [UEA CCP Innovation research](#). 2021.

¹⁹⁵ Financial Times, [Apple develops alternative to Google Search](#). October 2020.

¹⁹⁶ UEA [CCP Innovation research](#). 2021.

¹⁹⁷ Incremental innovations differ from breakthrough innovations in their magnitude, with breakthrough innovations being more significant in size and so more impactful than a single incremental innovation.

Disruptive innovations differ from complementary (or 'sustaining') innovations in their impact on the value of surrounding products. A complementary innovation may sustain or increase the value of products already in the market, where a disruptive innovation may go so far as to render them obsolete.

¹⁹⁸ [The Furman Review](#) notes: 'companies such as Uber and Zipcar in transportation, Airbnb in hotel and hospitality, and Deliveroo and UberEats in takeaway food delivery, are just a few examples of firms that have each used digital technology to innovate within areas of existing service provision.'

[Unlocking Digital competition, Report of the Digital Competition Expert Panel](#) ('The Furman Review'), March 2019.

270. Therefore, an improvement in competition within digital markets may lead to an increase in disruptive/breakthrough innovations and, it could be argued, subsequently increase consumer welfare relative to a counterfactual in which the main source of innovation is incremental/complementary.

Net impact on innovation

271. Overall, it is expected that the net impact on innovation will be positive. Whilst the impact on incentives is not clear cut, the overall improvement in contestability should lead both to increased new 'disruptive' innovative entry, and to increased pressure on incumbents to innovate. It is not expected that any countervailing costs presented in this subsection (e.g. increase in appropriability damaging incentives) to outweigh these positive effects. Furthermore, it is expected that through the implementation of the pro-competition regime the potential countervailing impacts on innovation would be accounted for when considering interventions on a case-by-case basis, and so would mitigate this risk or avoid certain interventions altogether.

272. In addition, the DMU will consider the expected costs and benefits of measures prior to implementation, and only proceed if they feel confident that their actions will be beneficial.

9E- Wider justice costs

273. The IA appraisal assumes compliance with regulation (i.e. firms the DMU regulates will comply with the rules and orders it sets out), as per guidance. It is expected that the DMU will ensure that firms with SMS comply with the regime by combining a participative approach with the use of formal powers. Through a participative approach, the Digital Markets Unit will engage constructively with all affected parties, resolving issues through advice and informal engagement, including in the context of conduct requirements. This will often achieve a fast and effective resolution and avoid unnecessary regulatory burdens associated with formal enforcement. However, in some cases, formal enforcement may be required to tackle non-compliance; and while financial penalties will be used in the majority of cases, this would in some cases require involvement from the UK justice system which would incur time and resource costs for the courts.

274. There may also be appeals by SMS firms against measures the DMU decides to implement or merger decisions. These may also result in additional costs, primarily to the Competition Appeals Tribunal (CAT) but then additional costs in higher courts if CAT rulings are appealed.

275. These costs have been explored further in a separate Justice Impact Test, prior to legislation being introduced. It is expected that SMS firms will appeal a significant proportion of decisions in the early days following the implementation of the regime, in order to test the appeals process. This will result in additional costs to SMS firms through bringing these cases to court. These costs to firms are only relevant to this analysis if their appeals are successful, as the cost of a failed appeal would reflect the firm being in breach of its legislative duties. However, the government imagines that the number of appeals will reduce as time goes on, and precedence is set, and any costs to firms will be marginal when compared with the benefits of the regime.

Section 10 - Monitoring and evaluation

276. Assessing whether government intervention has been successful ensures the government is held accountable, and provides evidence to inform future policy design. As discussed in

Section 3 - Policy objectives, the success of this intervention will be measured by monitoring and evaluating its effects and impacts, and comparing this against the original policy objectives.

277. Government is committed to undertaking monitoring and evaluation of appropriate quality - which will include monitoring activities, and a full post-implementation review (PIR).
278. This section lays out, to date, the progress that has been made towards developing the M&E plan for the regime. It then discusses the next steps the government will take towards finalising the M&E plan.

Summary of research

Phase one (March 2022 to December 2022)

279. As a first step in developing the M&E plan, the government commissioned external research on monitoring and evaluating the DMU and the pro-competition regime for digital markets - the research was developed with insights from the CMA, DMU, DCMS and BEIS¹⁹⁹.
280. The research commissioned suggests a framework for monitoring and evaluating the regime. It includes - theories of change, a monitoring logical framework and guidance on evaluation approaches. Below we summarise the research outputs.

Theories of change

281. The theories of change²⁰⁰ produced as part of the research map out how the intervention is expected to achieve its desired outcomes. Using the theory of change and taking into account the intervention's policy objectives, high level evaluation questions were suggested. Table 31²⁰¹ provides a summary of these questions as well as a consideration of potential data sources to help answer these questions.

Table 31: Potential evaluation questions

Impact Evaluation Questions	Process Evaluation Questions	Value for Money Questions
To what extent did the pro-competition regime contribute to the intended outcomes? <ul style="list-style-type: none"> in the expected timeframe? 	What has worked well, less well and why? (e.g. did SMS designations proceed more smoothly for some activities than others?)	To what extent has the intervention been cost-effective (compared to alternatives)?
To what extent have unintended outcomes (positive and negative) been produced?	What can be learned from established SMS designations, PCIs and CRs for future implementations?	What elements have been most cost-effective? Is the program the best use of resources?

¹⁹⁹ London Economics, [Monitoring and evaluating the new pro-competition regime for digital markets](#), 2023

²⁰⁰ See Monitoring and evaluating the Digital Markets Unit (DMU) and new pro-competition regime for digital markets - Annex 1 Theory of change diagrams

²⁰¹ The evaluation questions presented in Table 31 are non-exhaustive and will be finalised when government presents its monitoring and evaluation plan for this intervention

To what extent can changes be attributed to the DMU & pro-competition regime?	How were the DMUs activities affected by external factors (e.g. market conditions, regulatory actions in other jurisdictions)	
To what extent have particular features and particular market contexts made a difference?		
To what extent were there other influencing factors?		
To what extent have the UK digital market outcomes relative to other key international markets improved or deteriorated?		

Data Sources:

1. **Existing data sources:**
 - a. **Administrative Data:** It is anticipated that the DMU will collect some administrative data on SMS firms, it is unclear in what form this will be. However, it is expected that this data can be utilised to answer some of the evaluation questions specified above.
 - b. **Monitoring data:** The logical framework from the research highlights possible monitoring data to collect, this data can be used to track the progress of specific activities, outputs, outcomes and impacts identified in the theory of change. This data can also be used for evaluation *for example, data on number of SMS designations could be used to answer some process evaluation questions.*
2. **New data sources:** The regime is new and will result in the creation of a new regulator (the DMU), it is expected the DMU will be given information gathering powers and as a result additional data will be available for M&E purposes (at this stage it has not been communicated what these powers will be).

Monitoring logical framework

282. The logical framework proposes indicators that may be used for monitoring and evaluating the regime. Table 2 (see Section 3 - Policy objectives) outlines some of the suggested metrics and indicators. The potential metrics and indicators will be further developed through government and DMU research between now and the implementation of the regime (see next steps).

Evaluation approaches

283. The evaluation guidance in the research discusses methodologies to consider for evaluating the impact of the regime (impact evaluation) and effectiveness of the regime's processes (process evaluation). For impact evaluation suggested approaches include - Theory based approaches, experimental and quasi-experimental approaches. For process evaluation suggested approaches include - quantitative and qualitative approaches.

Next steps

Phase Two (January 2023 onwards)

284. Following on from the phase 1 research, the government will begin working towards finalising a M&E plan. This will involve:

- Further engagement with key stakeholders to develop and finalise the theories of change and logical framework from the research
- Additional research to fill in knowledge and data gaps identified in the research.
- Finalisation of evaluation objectives and questions
- Outlining monitoring provisions to be put in place and data requirements
- Identification of the types of evaluation to be undertaken, data requirements and approaches
- Confirmation of M&E roles and responsibilities between government departments and the DMU
- Confirmation of timelines for M&E activities including the PIR

Annex A - Assumptions and Risks

Assumption	Evidence	Risk	Relevant section	Sensitivity Analysis Undertaken
EA02 cost estimates associated with the phase 2 investigation stage used as a proxy for initial compliance costs	BEIS business survey	Compliance costs not accurately estimated	Intensive initiation process compliance costs	
It is assumed that there will be 4 SMS designations in the first year following the regime and each SMS firm will face one PCI investigation per annum	This is an indicative assumption based on high level engagement with the CMA	Compliance costs not accurately estimated	Compliance costs	
Historical merger data is used to provide an indication of the level of future M&A activity.	MergerMarket and Capital IQ	Merger report case estimates	Ongoing compliance costs	Case ranges have been used and these have been sense checked with the CMA
The conversion rate from merger reports to call ins for a merger investigation	Assumption based - due to the aim of the policy to make the CMA aware of cases that they may not have otherwise known about, this rate is uncertain.	The merger costs and benefits are heavily reliant on this assumption. If the true conversion rate falls above this range there will be greater costs to businesses but it is also likely that a greater number will be intervened in which will lead to significant associated benefits.	Ongoing compliance costs and benefits of SMS merger provisions	A range of 0-20% conversion rate has been used within this analysis.
The associated costs of a digital merger case are overall assumed to be consistent with non-digital cases.	Assumption based - there may be some changes in the resources required but there was no specific data available to refine the estimates.	Compliance costs for the merger requirements are not correctly estimated.	Ongoing compliance costs	
Ongoing compliance costs are	The size of compliance	Linkedin search results are	Ongoing compliance	

underpinned by the assumption that each SMS firm will add an additional 6 FTE to their current compliance teams	teams across telecommunication companies (based on LinkedIn search results).	limited and do not represent the real size of compliance teams.	costs	
Familiarisation costs are based on the time spent reading by compliance teams and lawyers	The wage rates are based on ASHE data and lawyer wages from gov.uk. The time spent reading assumptions is based on guidance used in a recent FCA document. ²⁰²	Familiarisation costs are not accurately estimated because the FCA guidance is not representative of the time needed by compliance teams to familiarise themselves with the Pro-competition regime.	Familiarisation costs	
Simple app development cost used as a proxy for the design and implementation of the choice screen	Business of apps assessment ²⁰³		Choice screen costs	£38,000 is the best estimate and £92,000 is a high estimate.
Ongoing costs are assumed to be 15-20% of the original development cost.	Business of apps assessment ²⁰⁴	Choice screen costs are not accurately estimated.	Choice screen costs	
TFL open data intervention used as a proxy	Deloitte analysis ²⁰⁵	Underestimation of the true costs	Data openness intervention cost	
Average user numbers across Google and Facebook relative to TFL user numbers to scale the costs.	Which? report highlights UK Facebook and Google user numbers. ²⁰⁶	Underestimation of the true costs	Data openness intervention cost	
Trips per day on TFL as a indication of the number of users of TfL	Trips per day ²⁰⁷			

²⁰² The assumptions are based on those utilised in a recent FCA document - FCA (2021) [Changes to the SCA-RTS and to the guidance in 'Payment Services and Electronic Money](#) – Our Approach' and the Perimeter Guidance Manual, (FCA consultation paper)

²⁰³ [Business of apps](#)

²⁰⁴ [Business of apps](#)

²⁰⁵ Deloitte, [Assessing the value of TFL's open data and digital partnerships](#), July 2017

²⁰⁶ Which?, [Value of the choice requirement remedy](#), 2021

²⁰⁷ Travel in London Report 13 - <https://content.tfl.gov.uk/travel-in-london-report-13.pdf>

Average cost associated with implementing an API is used as a proxy for contact interoperability	PlektonLabs ²⁰⁸	The estimate is not representative of the true costs.	Interoperability cost	
Estimated app development cost used as a proxy for the design and implementation of a choice regarding advertising preferences	Business of apps assessment ²⁰⁹	Simple app development costs not representative of the costs associated with the implementation of a choice screen.	Choice Requirement remedy cost	
Estimated GVA resulting from TFL's open data measure used as a proxy for the benefits that may result from a similar data openness remedy.	Deloitte assessment of TFL's data openness measure ²¹⁰		Benefits of a data openness PCI	
Benefits associated with a choice requirement remedy based on Which? Analysis using a willingness to pay methodology	Which? Report on the value of a choice requirement remedy ²¹¹		Benefits of a choice requirement remedy	
Prices fall by 1% due to competitive pressures	A conservative assumption has been made relative to the evidence on consumer prices, and excess profits, highlighted by the CMA's Online platforms market study			
The associated benefits of a digital merger case intervention are assumed to be consistent with those non-digital.	There was not a possibility of isolating digital case intervention impacts and therefore these had to be assumed as appropriate.	The scale of the benefits may not be truly representative of intervention in SMS mergers.	Benefits of SMS merger provisions	

²⁰⁸ [How to calculate costs for building and API](#)

²⁰⁹ [Business of apps](#)

²¹⁰ Deloitte, [Assessing the value of TFL's open data and digital partnerships](#), July 2017

²¹¹ Which?, [Value of the choice requirement remedy](#), 2021

Annex B - Risks and Impacts

Risk	Description	Impact	Likelihood	Severity
Market power is significant	Market power is so significant that the DMU's tools prove ineffective in improving competitive conditions in digital markets.	High - If the instruments used by the DMU are not effective in eroding market power and improving competition, it will not be able to meet its objectives.	Medium - The DMU would have significant knowledge of and expertise in digital markets. Under the preferred option, it would have an extensive toolkit to enable proportionate and targeted interventions to address even the most severe issues identified. However, there is still potential that certain tools will not have the desired effect in some markets.	High
DMU will not use powers effectively	There is a risk that the newly established DMU will not appropriately and effectively implement the tools at their disposal.	High - If the DMU does not use the powers granted to them appropriately then improvements to the competitive conditions in digital markets would be reduced.	Low - The government has worked with the CMA to develop the proposed pro-competition regime for the DMU. Therefore, there is agreement on the need for these measures to be implemented	Medium
Incorrect scope (mis- designation of SMS)	Related to the above, the DMU may not designate SMS appropriately, such that they capture too many or too few firms. This could mean targeting firms who are not contributing considerably to negative competitive outcomes/harm in their respective digital markets, or failing to target firms responsible for a significant amount of harm.	Medium - Extending the scope of interventions beyond the most powerful firms responsible for the majority of harms/ negative outcomes, risks unduly increasing the burden on businesses. The additional costs associated with a broader scope would likely outweigh the marginal benefits. A scope that is too narrow risks not targeting all of the firms whose market power must be tackled to rebalance competition and address harms, such that the DMU fails to meet its objectives.	Low - The DMU would have significant knowledge of and expertise in digital markets. The SMS designation process would ensure assessments could be made in the round, rather than relying on 'bright line' rules/metrics, thus reducing the risk of firms inadvertently falling into or out of scope. Assessing whether a firm has, in respect of a digital activity, substantial and entrenched market power and a position of strategic significance, will ensure only the most significant firms with the greatest impact on respective activities are targeted.	Low

Compliance and Familiarisation	There is a risk that compliance and familiarisation will be a greater burden to SMS firms than estimated within this analysis.	Low - The relatively low indicative estimates within this document are benchmarked against estimates for comparable measures.	Medium - The estimates in this IA are indicative only and do not form part of a value for money assessment. The true costs may differ from these estimates.	Low
SMS firm compliance	There is a risk that SMS firms may choose to not comply with new regulations, and either accept any potential resulting penalties/sanctions, or they evade enforcement action because of the difficulties of enforcing a UK judgement overseas, in an attempt to maintain their position of power.	Medium - If SMS firms do not comply with DMU measures, the expected impact on digital markets would be stalled. However, in the long term (dependent to some extent on international co-operation to enable the enforcement of UK judgments overseas, or on the use of alternative enforcement mechanisms such as senior manager liability) it is expected that courts could enforce compliance, and continuous fines could erode market power over time	Low - SMS firms may see the potential fines for non-compliance as a risk/cost of doing business and continue operating unchanged in order to protect their market power, or may rely on the difficulties in enforcing UK judgments overseas to avoid penalties. However, the potential for significant penalties, and the consideration of further measures, alongside the desire for these firms to retain their reputation as 'responsible, good actors', should be sufficient to incentivise compliance even from firms with substantial market power.	Medium
International regulatory divergence (see 'potential trade implications section' for further detail)	Coherence across the regulatory landscape would help to enforce fair principles and promote competition in global digital markets. In regulated markets, there is a concern that global regulatory divergence or fragmentation can lead to greater trade friction - especially for smaller firms - as operating in multiple jurisdictions can impose a higher compliance burden.	Medium - The UK pro-competition regime will be targeted towards only a small subset of digital companies designated as having 'Strategic Market Status'. Only very large firms with, in respect of a digital activity, 'substantial and entrenched' market power and a position of strategic significance, will be subject to regulation under the pro-competition regime. These large digital firms invest significantly in R&D and are responsible for employing a large number of people in the UK.	Low - There is significant international momentum towards digital markets reform and many countries are seeking to develop their own policy and regulatory approaches to digital competition, including antitrust initiatives underway in the US and the Digital Markets Act proposals in the EU. ²¹² A number of countries have already introduced new legislation to promote competition in digital markets, including Germany, Japan, Australia and the Republic of Korea. The UK remains committed to developing a regime that is coherent with other	Low

²¹² Other national efforts to tackle digital competition include: the establishment of the Headquarters for Digital Market Competition in Japan; recent German competition legislation; and a new digital unit being set up in the French competition authority.

		<p>Theoretically, if regulatory fragmentation led international regulatory divergence to reduce their investment in the UK (e.g. relocate existing operations, or reconsider expanding their service into the UK), this could have a negative impact on digital markets and the UK economy more generally. However, this traditional concern with regulatory fragmentation does not apply to the UK pro-competition regime given the narrow scope of impact on SMS firms. Furthermore, it is possible that any impact on SMS investment flows could be replaced with new investment flows or domestic investment. This may occur either due to the increased burden associated with regulatory fragmentation, or as firms believe they can in some way avoid regulation by diverting resources from one jurisdiction to another to avoid the burden of regulation.</p>	<p>jurisdictions as the Government continues to advocate more broadly for a coherent global approach to the regulation of digital markets. Furthermore, the Government is aware from our extensive stakeholder engagement that our regime is advantageous in many ways when compared with other regimes, rather than too rigid or detrimental to businesses or consumers. Finally, regulation of an SMS firm would apply regardless of its physical operations in the country (providing it continues to make its service available in the UK), suggesting a low likelihood of SMS firms diverting resources in response to greater regulation in the UK than other jurisdictions.</p>	
<p>Withdrawal of services/ functionality in the UK (see 'potential trade implications section' below for further detail)</p>	<p>SMS firms may respond to new and/or increased regulation by offering different services or reduced functionality to UK consumers. See for example, the dispute between Facebook and the Australian ACCC regarding payments to news publishers,</p>	<p>High - If functionality was reduced by some of the most popular digital services, the result would be a degraded experience for the millions of UK consumers who can typically use many of these services on a daily basis.²¹³ Thus whilst trying to improve a service, or the choice of</p>	<p>Low - Government believes the likelihood of this occurring is relatively low, given the open, transparent, and participative approach the DMU will take to regulation, including consultation with affected parties. In the aforementioned Australia-Facebook example, engagement between senior Australian officials and Facebook</p>	<p>Low</p>

²¹³ For example, social media and messaging sites reach 98% of the UK adult digital population. In 2019, on average, UK visitors aged 18+ spent 49 minutes per person per day on social media sites. They also spend 12 minutes per day on news sites, and 14 minutes on e-commerce sites. Comscore MMX Multi-Platform, Sep 2019 (Nov 2019 for social media). Via Ofcom, [Online Nation report](#) (2020).

	where Facebook temporarily blocked Australian users from sharing or viewing news content on its platform.	services, for UK consumers, the regulator might inadvertently actually deprive them of it altogether.	executives led to the situation being resolved and news content being restored for Australian Facebook users. ²¹⁴	
Reduced value of platforms to consumers	As mentioned above, a number of digital markets can be prone to 'network effects', meaning that the value of a platform to users on both sides of the market is increased as the number of users increases. If an increase in competition leads to greater switching away from certain platforms, this may result in a reduction in the number of users of those platforms. The result could be a reduction of utility for the end and business users left on the now relatively worsened platform (i.e. users who did not switch).	Low - From an overall economic perspective, consumers will switch to a new platform if they feel that they can derive a greater level of utility from doing so. This should somewhat offset any potential negative impacts on the utility of consumers 'left behind' on the original platform. In addition, PCIs such as interoperability should allow for platforms to work well together and therefore reduce the impact of network effects currently experienced under the counterfactual.	Low - If an increase in competition results in consumers switching away from incumbents, the presence of network effects could mean that the value remaining consumers derive from these platforms would be diminished. This could be mitigated by further interventions that erode the impact of network effects more generally. In addition, it is likely that many users will multi-home rather than switch consumption entirely away from (i.e. stop using) the original platform.	Low
Additional costs of 'multi-homing'	In response to the proposed measures, consumers may decide to 'multi-home', meaning they will consume more than one service within a market (e.g. using both Facebook and Twitter). This may cause consumers to experience an increased total cost (e.g. higher 'data cost' as they are now sharing their data with more than one party).	Low - A significant number of services are free at the point of consumption, meaning there would be no financial implications. Furthermore, any additional 'data cost' of multi-homing should be somewhat offset by the additional benefit consumers would receive from multi-homing.	Medium - Multi-homing is a welcome outcome of the proposed measures as it has been well-established that more viable alternative services for consumers would represent a desired increase in competition within digital markets.	Low

²¹⁴ BBC News, [Facebook reverses ban on news pages in Australia](#). February 2021.

Regulatory Failure	DMU interventions may result in a worse allocation of resources than in the counterfactual.	High - The aim of the DMU is to rebalance market power and remedy consumer harms. If the DMU intervenes in markets and gets it wrong, harms could be exacerbated, and consumer outcomes made worse than before.	Low - The DMU would have significant knowledge of digital markets, and safeguards in place to ensure that interventions are proportionate, effective, and minimise the risk of unintended consequences. Certain interventions (e.g. complex and significant PCIs) would carry a higher risk of unintended consequences.	Medium
<p>Example 1 Regulatory failure:</p> <p>Unintended impacts in adjacent markets</p>	Interventions on SMS firms in one market may have anti-competitive impacts in other markets.	Medium - digital markets can be strongly interrelated with dependent, more traditional markets. If the DMU fails to recognise potential unintended consequences associated with this, such as hindering an SMS firm providing healthy competition in an otherwise concentrated adjacent market, the negative impacts on markets outside of the DMU's remit could be significant.	Low - The DMU would have significant knowledge of digital markets, and safeguards in place to protect against the risk of unintended consequences. It is also expected that a consideration would be given to SMS firms' roles in adjacent, related markets.	Low
<p>Example 2 Regulatory failure:</p> <p>Unintended dampening of innovation</p>	Certain interventions aimed at boosting competition in digital markets, may risk having undesired impacts on innovation (e.g. by negatively impacting the incentives to innovate).	Medium - Any unintended negative impact on innovation resulting from a specific intervention would be expected to be counteracted, to some extent, by the general increase in competition resulting from the intervention and the pro-innovation effects this would naturally bring.	Medium - As presented in the UEA CCP report, evidence on the relationship between competition and innovation in digital markets is relatively weak, and it can be difficult to properly assess the potential innovation impacts of competition policy until after the fact. As such, the regulator will have to make decisions based on weak evidence and under uncertainty, hence raising the risk of unintended negative consequences.	Medium

Annex C - Pro-Competition exclusion

285. In order for a measure to be eligible for a pro-competition exemption, it has to satisfy the following criteria:

- The measure is expected to increase, either directly or indirectly, the number or range of sustainable suppliers; to strengthen the ability of suppliers to compete; or to increase suppliers' incentives to compete vigorously.
- The net impact of the measure is expected to be an increase in [effective] competition (i.e. if a policy fulfils one of the criteria at (a) but results in a weakened position against another) and the overall result is to improve competition.
- Promoting competition is a core purpose of the measure.
- It is reasonable to expect a net social benefit from the measure (i.e. benefits to outweigh costs), even where all the impacts may not be monetised.

286. It is believed that this measure satisfies all of the criteria outlined above. The case for this is outlined below:

A: The measure is expected to increase the number of sustainable suppliers

287. The PCIs, under the preferred policy option, will be used by the DMU to target SMS firms' source of market power directly by overcoming barriers to entry and this will open up the market to new suppliers. To this end, by making the market more contestable it is expected that the use of PCIs in particular will increase the number of sustainable suppliers within digital markets. Taking platform interoperability as an example, it is expected to further competition by enabling the positive network effects stemming from the large user base of an incumbent platform to extend to other platforms (potential rivals). Increased interoperability could place new entrants on a more equal footing with incumbents, which would make the market more contestable. This would help to facilitate competition on the merits as opposed to the size of the installed base.

288. Alongside PCIs, the conduct requirements are used to reduce the potential for harm from *exclusionary* practices by incumbents. As well as reducing harm to direct competitors, this should lead to an increase in the number of firms operating within digital markets by reducing barriers to entry.

289. There is strong evidence to suggest that there are currently significant barriers to entry and constraints that limit consumers' ability to switch to alternative competitors within digital markets. For example, within the CMA's 'mobile ecosystems' market study the CMA found that both Apple and Google face a lack of competitive constraints in the supply of mobile devices and operating systems.²¹⁵ Potential suppliers of new mobile operating systems face material barriers to entry such as: the need to attract users and app developers; the need to attract device manufacturers; and development and maintenance costs. These barriers reinforce each other and are reinforced by material barriers to switching on the user side.²¹⁶ The existence of barriers to entry is reflected in the exit/failed entry of well-resourced companies in smartphones

²¹⁵ CMA, [Mobile ecosystems market study](#), December 2021

²¹⁶ Such as learning costs, transferring of data, apps and subscriptions, and the availability of first party apps such as iMessage.

and operating systems such as Microsoft and Amazon²¹⁷. The existence of barriers to switching is evidenced by survey data indicating low levels of switching and multi-homing between Apple and Google's operating systems. Reducing barriers to entry and switching can be expected to further increase Apple and Google's incentives to compete and strengthen the ability of potential suppliers to compete.

B: The net impact of the measure is expected to be an increase in effective competition

290. As mentioned above, due to high barriers to entry, there are currently only a few suppliers within key digital markets. For example, Google and Apple are the only 2 key mobile operating systems in the UK (over 98% of the market share) and Google has a 90% market share in the publisher ad server.²¹⁸ A core objective of the competition regime for digital markets is to target SMS firms' sources of market power directly by overcoming barriers to entry, which currently limit effective competition. By granting the DMU the statutory powers to tackle the key sources of market power within digital markets, an increase in effective competition is expected in digital markets.
291. Additionally, active merger control can help prevent further excessive market power being gained by a small number of firms. Evidence suggests that some M&A could be undertaken with the rationale of eliminating future innovative competitors, who may then be shut down.²¹⁹ Through greater merger transparency, the CMA will be able to review and intervene in these mergers to safeguard competition. This will allow the otherwise acquired companies to establish and compete in the future. This can foster disruptive innovators which could result in higher innovation, the creation of new or higher quality services, and lower costs and more choice to users.

C: Promoting competition is a core purpose of the measure

292. The promotion of competition in digital markets is the objective of this regime. The UK Government is seeking to establish a new pro-competition regime, to be overseen predominantly by the Digital Markets Unit (DMU), to promote competition to further the interests of consumers in digital markets. By addressing both the sources of market power, and the economic harms that result from the exercise of this power, the pro-competition regime will improve consumer outcomes and drive growth and innovation in the digital economy.

D: It is reasonable to expect a net social benefit from the regime

293. The regime is expected to result in a significant net social benefit to the UK (i.e. it is expected that the benefits of the regime will outweigh the costs). The quantified benefits in this IA are largely driven by the implementation of a choice requirement remedy and the control this gives users over their personal data. However, the benefits from this regime are expected to be driven by the reduction in a number of consumer harms that derive from insufficient competition, and the lack of choice consumers have over how their data is used, is just one example of harm being remedied. The CMA highlights a long list of harms that the regime is expected to mitigate: reduced innovation; higher prices paid for goods and services; broader social harms and poor returns for consumers²²⁰. To this end, it is likely that the quantified benefits in this IA only capture a fraction of the potential benefits of the regime. While at this stage it has not been possible to quantify all the wider potential costs and benefits associated with this regime, Government expects the benefits are likely to be significant because within digital

²¹⁷ CMA, [Mobile ecosystems market study](#), December 2021

²¹⁸ CMA, [Online platforms and digital advertising](#), July 2020

²¹⁹ For example, Facebook (Meta) has acquired and then shut down four other social networks, including Lightbox, a London-based photo sharing start-up. Tim Wu, Stuart A. Thompson. The New York Times (2019). [The roots of Big Tech run disturbingly deep.](#)

²²⁰ CMA, [Online platforms and digital advertising](#), July 2020

markets, there is both evidence of insufficient competition²²¹; and how this lack of competition is harming consumers. For instance, the CMA estimates that UK families are losing out on £2.4bn per year from Facebook and Google's high advertising prices alone²²². Furthermore, an in-depth analysis of Google and Bing's search prices, showed that prices, charged by Google, are 30-40% higher on desktop and mobile when comparing like-for-like search terms.²²³

294. As mentioned above, the Government believes that it is reasonable to expect a net social benefit from the regime, however, and to reduce the likelihood of unintended consequences (i.e. additional unexpected costs), a number of safeguards have been built into the regime. For example, the DMU will undertake a 9-12-month investigation to determine whether a firm meets the SMS criteria, but there will also be a consultation at key decision points (i.e. on draft conduct requirements and provisional PCI decisions). Beyond this, the DMU will monitor PCIs (following implementation) to ensure they remain effective and result in net social improvement.

²²¹ CMA, [Online platforms and digital advertising market study](#), page 9, July 2020

²²² CMA, [Online platforms and digital advertising](#), July 2020

²²³ CMA, [Online platforms and digital advertising](#), July 2020

Annex D - Final Offer Mechanism (FOM)

The FOM Process and An Indication of The Possible Impacts

295. FOM will be part of the DMU's conduct requirement enforcement toolkit, and is specifically designed as a backstop tool to resolve complex payment disputes between SMS firms and third parties, where there has been a breach of the conduct requirement to offer fair and reasonable terms.
296. In order to be referred to FOM, the DMU must first have imposed on the SMS firm a conduct requirement stating that they must offer fair and reasonable payment terms. If this is breached and fair and reasonable terms are not offered then an enforcement order will be issued by the DMU, aiming to bring the firm's conduct back into compliance. This enforcement order may also include additional requirements on firms to aid with compliance, for example mandating the sharing of certain information.
297. If the firm still does not comply, and breaches the enforcement order, the DMU can then consider whether FOM is appropriate to use, and whether the legal threshold has been met. This will require the DMU to consider whether the breach could be satisfactorily resolved in a reasonable time period by using its other tools. If not, FOM can be used.
298. Upon being referred to FOM, parties will be advised that they must prepare bids on what they believe to be fair and reasonable terms. During this period, the DMU will carry out information gathering and sharing from and to both parties, to ensure that both can prepare well evidenced bids. Both parties must respond to these information requests.
299. It will be up to the parties to decide what resources they need in order to prepare credible bids. Each party will likely consult lawyers as well as financial teams during this process. However, the exact level of resources required will depend on the complexity of the case.
300. There are no examples of FOM to draw upon, which makes it difficult to accurately estimate the potential costs firms may incur as a result of the FOM process. In the absence of more information, the department has looked to the administrative costs associated with an International Chamber Commerce (ICC) Arbitration²²⁴. The ICC cost calculator enables parties to produce an estimate of the likely administrative costs associated with arbitration as well as the arbitrator's fees. The cost calculator doesn't account for the costs associated with preparing offers and will therefore underestimate the total costs associated with an arbitration process. As the CMA is a public authority and not a commercial arbitrator, there is no fee for the CMA. To this end, only the administrative costs are presented below.
301. The ICC cost calculator suggests that an arbitration with an amount in dispute of \$10,000,000 (£8,200,000) and one arbitrator will cost £47,162 (\$57,515) in administrative expenses. The administrative costs fall to £19,135 (\$23,335) with an amount in dispute of \$1,000,000 (£820,000) and rise to £123,000 (\$150,000) with an amount in dispute of \$1bn (£820m)²²⁵.
302. Following this, both parties will then finalise and share their bids with the DMU. The DMU will then consider the two bids, and decide on which is fairer and more reasonable. The outcome of this is binding and must then be implemented by the firm.

²²⁴ [International Chamber of Commerce](#), Cost of Payment.

²²⁵ The above estimates were converted from USD estimates using a 0.82 conversion rate.

How Frequently Will FOM Be Used?

303. The department cannot predict exactly what action will be taken by the CMA, nor the conduct of potential SMS firms, however the tool has been designed for use only as a backstop enforcement tool for when firms are in persistent non-compliance with conduct requirements to offer fair and reasonable terms. In using it, the DMU will first need to be able to demonstrate that none of its other tools would resolve the dispute more effectively within a reasonable timeframe.

Will FOM Have an Impact on Compliant Businesses?

304. The CMA will only be able to use Final Offer Mechanism if the following conditions are met:
- The CMA has followed usual enforcement processes²²⁶, and yet there is still a dispute over payment terms and a breach of an enforcement order; and
 - The CMA considers that FOM is the most appropriate remedy to resolve the dispute in a reasonable time frame.
305. Based on the conditions above, there is no risk of compliant businesses being affected by this mechanism.

²²⁶ SMS firm instructed, as part of its conduct requirements (CR), to offer fair and reasonable payment terms to a third party; CMA suspects or receives complaint of breach of the CR; CMA carries out a breach investigation (up to 6 months); CMA finds breach of CR; CMA issues enforcement order to bring conduct back in line with original requirements.

