The Competition and Markets Authority's response to government's White Paper, 'AI regulation: a pro-innovation approach'

Introduction

1. The CMA is the UK's principal competition and consumer authority. It is an independent non-ministerial government department and its responsibilities include carrying out investigations into mergers and markets and enforcing competition and consumer protection law. The CMA helps people, businesses and the UK economy by promoting competitive markets and tackling unfair behaviour.[1]

2. We welcome the opportunity to comment on the White Paper "A pro-innovation approach to AI Regulation".[2] Our response is shaped by our responsibility for promoting competition in the interest of consumers, drawing on our research into the benefits, harms and auditing of algorithms,[3] our horizon scanning work and our recently launched project into foundation models.[4] We also draw on our experience of addressing the applications and uses of AI and algorithmic systems in the context of exercising our formal functions, including market studies, antitrust and consumer protection work.

3. AI is creating many opportunities for businesses to deliver more useful, accessible and personalised online services, such as in search, chatbots and productivity software. But we also see potential risks that AI can pose. To name a few examples in our remit, these include enhancing incumbent firms' ability to self-preference at the expense of new innovators, giving consumers false or misleading information, or insufficient transparency for consumers and businesses. We are at a pivotal moment in the development of a transformative technology. Maximising the potential for people and

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[1] Our purpose and ambitions can be found in our annual plan 2023-4.

[2] A pro-innovation approach to AI Regulation (DSIT 2023).

[3] Algorithms: How they can reduce competition and harm consumers (CMA 2021); The benefits and harms of algorithms: a shared perspective from the four regulators (DRCF 2022); and Auditing algorithms: the existing landscape, role of regulators and future outlook (DRCF 2022).

[4] Case page: AI Foundation Models: initial review. Press notice: CMA launches initial review of artificial intelligence models.

businesses will require open, competitive markets and effective consumer protection.

4. In AI as elsewhere, we believe that effective competition is an important means for spurring innovation and open markets to the benefit of businesses, consumers and the wider economy, and consumer protection law is an important tool for helping ensure that consumers are not misled or subject to unfair trading when buying products or using services online. Our work can therefore make a strong contribution to government's AI agenda, in coordination with other regulators, as these markets develop.

Summary

5. We support government's approach of leveraging and building on existing regulatory regimes whilst also establishing a central coordination function for monitoring and support. We think this will achieve the context-specific approach to regulation that government is aiming for. We also see the benefits of a framework that is pro-innovation, proportionate, trustworthy, adaptable, clear, and collaborative.

6. There are four key messages we would like to emphasise:

    (a) We support government's approach of initially placing the principles themselves on a non-statutory footing.

    (b) We have begun considering how each of the proposed principles might apply to our current and future remit. Some of these principles are more closely related to our remit than others. We look forward to discussing this further with government as it takes this policy forward.

    (c) We recognise the need for the central coordination function(s), to support the implementation, monitoring and development of the framework and promote coherence across regulators. We commend the intention not to duplicate the work of regulators, and encourage making use of existing institutions' expertise where it exists.

    (d) Finally, we support cross-regulatory coordination and coherence, through the Digital Regulation Cooperation Forum (DRCF) and other initiatives.[5] We acknowledge the need to ensure AI innovators are adequately supported and will support government in delivering a cross-regulatory AI sandbox or testbed with our DRCF colleagues. We are looking forward to

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[5] DRCF Terms of Reference 2022.

sharing the learnings of the DRCF pilot for a similar advisory service which should conclude in August 2023.

The effectiveness of the non-statutory regime

7.   We support government's approach of placing the principles themselves on a non-statutory basis in the first instance. We agree with government on the importance of monitoring the effectiveness of the non-statutory approach before moving to a statutory one.

8.   We agree that introducing a new duty for regulators to have due regard to the principles could increase the effectiveness of the principles' use in AI regulation. For clarity, we note that, in the absence of any additional duties or obligations on developers, firms, and business users, regulators cannot directly enforce the principles and framework itself, but must rely on where their existing duties and responsibilities intersect with the aims of government's approach to AI regulation. Within our competition and consumer protection remit, it is therefore particularly welcome that government has introduced the Digital Markets, Competition and Consumers Bill to ensure that our powers are up to date and effective.

Initial thinking on applying the framework to current and future CMA work

9.   We can see the importance of each of the cross-sectoral principles for AI regulation when considering the opportunities and risks AI brings. These principles build on the OECD's AI Principles, in line with government's goal of ensuring international interoperability and building on existing initiatives.

10. We look forward to receiving government's guidance to regulators on applying the cross-cutting principles. We will give consideration on how best we might be able to provide guidance on how we interpret the principles in relation to our remit. Any guidance must be consistent with existing guidance, and create further clarity, not confusion, for firms. We agree with government's observation that in some cases joint guidance between regulators may be appropriate, and point to our experience in producing joint work with the ICO and Ofcom, discussed in the final section of this response on regulatory coordination. We welcome further discussion with government on potential guidance.

11. The proposed cross-sectoral principles are intended to cover a wide range of regulatory fields. As a result, it is not surprising that some relate more closely to our remit than others; and some may be much more directly relevant to other regulatory bodies.

12. In the following paragraphs, we go through each principle and discuss these possible interactions as we currently understand them.

13. **Principle 1: Safety, security, robustness**

   (a) The CMA acts to prevent harm to competition and consumers. The harms we prevent are not the type of harms commonly thought of when people think of safety. Harms to competition tend to be long-term, structural and indirect economic effects, such as reduced innovation in markets, and higher costs for consumers.[6] Additionally, consumers can directly suffer when their rights under consumer protection law are infringed. The CMA looks at safety via these narrow lenses, but not more broadly, in the way the Office for Product Safety and Standards might, for example.

   (b) When markets are working well, firms should be well-placed and face the correct incentives to determine and implement the appropriate level of security and testing to ensure that their systems function robustly (or to require this from their suppliers), and customers can take their business elsewhere if products fall short. However, where AI use affects a consumer who may not be in a position to assess technical functioning or security of the product, we may need to intervene to ensure that consumers' interests are protected.

   (c) One example of our work in this area is our ongoing enforcement cases against Amazon and Google in relation to possible breaches of consumer protection law. These cases are based on our concerns about whether Amazon and Google are doing enough to tackle fake and misleading reviews on their websites – including whether their relevant AI detection systems are sufficiently robust to circumvention by bad actors.

14. **Principle 2: Appropriate transparency and explainability**

   (a) Making sure that AI is appropriately transparent and explainable is well aligned with our competition and consumer protection objectives, with some caveats that we note below.

   (b) When markets are working well, informed customers can choose products suited to them, providing incentives for firms to meet their needs and stimulating competition. Under consumer law, consumers are entitled to be informed of how companies' use of AI influences their decision-making when making choices and decisions about products and services online.

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[6] We highlighted these long-term harms in our response to the policy paper: Response to DCMS pro-innovation approach for regulating AI, September 2022.

Furthermore, consumers should not be misled in their decision-making online. For example, consumers may be led to believe that a firm's AI system is making 'objective' recommendations for options based on relevance or another criteria valued by consumers, when in fact the recommendations are primarily influenced or determined by payments or profitability to the firm. Another example might be if a product or service that relies on an AI language model provides false or misleading information, in a context where the consumer is making an economic decision, this could come under the scrutiny of consumer law.

(c) Transparency is also important for our competition objective. For example, transparency can be important where firms with enduring market power over gateway positions operate AI systems that have substantial influence over other firms' access to customers and economic success, such as whether or not they are recommended or ranked prominently on platforms. Relevant transparency for these purposes could take the form of guarantees that no self-preferencing or undue discrimination is occurring against competitors, or that provided data is being used only for certain purposes – these could be important assurances for market participants.

(d) CMA remedies often include transparency measures, and remedies in digital markets often include the use of AI. For example, our investigation into social media endorsements led Facebook to provide undertakings to help users improve disclosures in their social media posts to make it clear when users have been paid/incentivised to endorse a product. This includes using AI to spot when users might not have disclosed paid endorsements.[7]

(e) In general remedies could result in firms disclosing information about algorithmic systems/AI to consumers, approved researchers, auditors and regulators, and/or conducting and publishing algorithmic risk assessments. Such remedies may be available in the context of consumer or competition enforcement work or in relation to DMU functions in future.

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[7] See the press release on Facebook's undertakings in relation to social media endorsements on Instagram here. In addition to Facebook using AI to prompt users to take action to adequately disclose if they have been paid, the CMA's DaTA unit used AI to detect suspected unlabelled incentivised endorsements during the investigation.

(f) This principle may be relevant when considering the application of the conduct requirement objective 'Trust and Transparency' as set out in the Digital Markets, Competition and Consumers Bill.[8]

(g) In terms of caveats in relation to the transparency principle, as discussed in paragraph 10 of our public response to DCMS's policy paper last year, there may be many considerations that limit the extent of transparency that is appropriate. These include the need to protect confidential information and intellectual property rights, as well as mitigating the risk of gaming, manipulation, or facilitation of collusion – where these may harm consumers, the CMA must factor these into decisions. In these cases, firms must provide full transparency to regulators, which are accustomed to treating such information subject to obligations to protect confidentiality. In addition to regulators, in some cases firms may be able to provide more transparency and explainability to approved researchers than the public at large.

15. **Principle 3: Fairness**

(a) There is considerable overlap between this principle and our remit. Consumer protection is often about preventing traders treating consumers unfairly when they are at an information disadvantage. A key element of competition policy is about ensuring an effective competitive process, and ensuring that firms can compete on the merits without unfair hindrances (including those arising from AI systems that underpin the functioning of markets, such as self-preferencing in recommender engines) so that the best firms and products can win.

(b) It should be noted that AI systems and algorithmic decision-making hold promise for enhancing consistency and fairness and reducing bias, relative to unaided human decision-making. However, there are clear risks of discriminatory outcomes arising from the use of AI, particularly in the use of AI that targets individuals or groups for personalised treatment, as AI is known to scale up biases in its training data which reflects real world biases.[9] We are not best placed to tackle all of these biases, and many primarily invoke equality law on protected characteristics. However, in addition to equality law, consumer or competition law can be contravened where vulnerable groups of consumers are particularly

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[8] See 19 (5) of the DMCC Bill.

[9] See, for example, Mehrabi, N., Morstatter, F., Saxena, N., Lerman, K., & Galstyan, A. (2021), 'A Survey on Bias and Fairness in Machine Learning'.

affected,[10] and in some contexts, price discrimination[11] can distort competition or facilitate other exclusionary practices that prevent competition from smaller rivals.[12]

(c) In embedding considerations of fairness into AI, we consider this should include the context surrounding the AI system and not just the algorithm itself; for example, data collection, testing and evaluation practices. Defining fairness must be context-specific, as there is no universal or objective definition, and each case has many considerations and trade-offs.

16. **Principle 4: Accountability and governance**

(a) As a matter of policy, the CMA holds legal persons responsible for the effects of AI systems that they deploy in relation to our remit. We hold firms accountable through our competition and consumer law tools already, including insofar as products and services relying on AI systems affect competition and consumers.

(b) We might also be able to hold firms accountable directly through the new proposed ex ante functions in the Digital Markets, Competition and Consumers Bill. For example, if a firm is designated as having Strategic Market Status (SMS) and the relevant algorithmic activity is within the scope of its SMS designation, it would fall within the remit of the digital markets regime.

(c) There may be some novel challenges regarding accountability for certain AI systems. For example, there has been a recent debate within the international competition community on tacit algorithmic collusion, a hypothetical situation where pricing algorithms learn to reach collusive outcomes without any explicit coordination, information sharing or intention by human operators.[13] We therefore welcome further discussion with government and others on such novel situations.

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[10] The CMA Paper has more information on the interactions between fairness and harm to competition and consumers, including examples relating to geographic targeting, online sharing economy platforms, ad targeting, and unfair ranking.

[11] Price discrimination is the practice of charging different customers different prices that are not justified by differences in cost.

[12] See for instance OFT (2013) 'The economics of online personalised pricing'.

[13] For example, this study titled 'Adversarial competition and collusion in algorithmic markets' found it is possible for different pricing algorithms to learn to collude, even if they do not share underlying code.

17. **Principle 5: Contestability and redress**

   (a) In addition to the obvious benefits to achieving natural justice, clear routes to redress and/or challenge (including those that do not involve regulatory intervention or costly litigation via lengthy court proceedings) have a deterrent effect.

   (b) Although injured parties can launch private actions, another method of contesting (and eventually obtaining redress via follow-on damages or a voluntary redress scheme) is to complain to an authority with the powers and resources to investigate potential infringements.

   (c) As discussed in the CMA Paper,[14] the opacity of algorithmic systems and the lack of operational transparency make it hard for consumers and customers effectively to discipline firms.

   (d) Against this backdrop, it is essential that regulators are adequately equipped with the resources and expertise to monitor potential harms in their remits, and the powers to act where necessary. This is particularly important in a domain like AI, where consumers may have little understanding of the complex services they're interacting with.

How we are building our capability and staying up to date on developments in AI

18. Given our remit relates to enforcing competition and consumer protection law in the UK, and soon additional responsibilities under the pro-competition regime for digital markets, we have established expertise in the areas of legal, economic, policy and technical professions (data scientists and technology advisors) across the organisation. Most importantly for AI, our DaTA unit, established in 2019, has led the way in a technology-led transformation at the CMA, and in collaboration with the DMU is leading thinking on the regulation of AI products and services.[15] We are building on these existing capabilities, particularly in the context of AI.

19. More specifically our DaTA unit includes data scientists, data engineers, technologists, foresight specialists, and behavioural scientists. The former three professions include individuals with experience in machine learning and AI. These skillsets have been utilised in competition and consumer casework,

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[14] Algorithms: how they can reduce competition and harm consumers. (CMA 2021)

[15] More can be read in the CMA's 2022 paper, 'The technology-led transformation of competition and consumer agencies: The Competition and Markets Authority's experience'

for proactive research in emerging technologies and in understanding and solving the complexities of where technical and legislative matters intersect.

20. We conduct regular horizon scanning to anticipate and explore new and emerging technologies and trends in digital markets. This function, run jointly by the CMA's DaTA unit and its Digital Markets Unit, identified foundation models as an area of priority interest to the CMA in August 2022, months ahead of ChatGPT's launch. We will continue to use and develop our scanning capabilities to ensure we are aware of the risks and opportunities that new technologies present, including coordinating with the other members of the DRCF through our emerging technologies workstream.

21. We recognise that some regulators may not be as equipped with technical expertise to manage the potential risks and opportunities of AI in their respective remits. We welcome discussion with government on how the CMA and the DRCF might help to support other regulators in their efforts to understand and manage the implications of AI, and share our learnings on building capability.

Foundation models: initial review

22. Foundation models, as discussed in the White Paper, have the potential to transform much of what people and businesses do. To help ensure that innovation in AI develops in a way that benefits consumers, businesses and the UK economy, we recently launched an initial review in foundation models.[16]

23. The initial review aims to:

   (a) Examine how competition in the markets for foundation models and their use could evolve;

   (b) Explore what opportunities and risks these scenarios could bring for competition and consumer protection; and

   (c) Produce guiding principles that support competition and protect consumers as AI foundation models develop.

24. Any guiding principles arising from this work will help inform how we plan to implement and apply government's framework in our remit.

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[16] The statement of scope: AI Foundation Models: Initial Review. (CMA 2023)

25.	The review may also result in recommendations to other regulators, or to government, with respect to its approach to AI regulation as outlined in the White Paper.

26.	The review will focus on three themes including:

(a)	Competition and barriers to entry in the development of foundation models;

(b)	The impact foundation models may have on competition in other markets; and

(c)	Consumer protection (such as false and misleading information).

27.	We are seeking views and evidence from stakeholders and welcome submissions by 2 June 2023. We will publish a report setting out findings in September 2023.

The central coordinating functions

28.	Given the cross-sector and cross-discipline impact of AI, we see value in coordination across regulators, driven both by government and by the regulators ourselves. Where possible extra coordination should take care not to duplicate existing work and should make use of existing organisations with appropriate knowledge and expertise to carry out these functions.

29.	While this function could be efficiently established within DSIT now, we agree that it might benefit from independent delivery in future. We suggest that regulators be consulted should government consider this direction, to ensure they are assured of the knowledge and expertise of any new or existing candidate organisation(s) who may carry out functions that will effectively oversee regulators.

Role of the DRCF and coherence across regulators

30.	The DRCF approach of cooperation between digital regulators has begun to demonstrate that through close collaboration and coordination, regulatory coherence between regulators can be achieved through informal and flexible arrangements. Our ongoing algorithms programme has provided a good opportunity to pool our existing knowledge and understanding of AI in a series of publications, and this year we are, among other things, focusing on regulators' capability to assess the landscape of auditing of algorithmic systems and the potential impact of Generative AI through a range of internal and external workshops.

31.	Careful consideration would be required in order to avoid increasing coordination challenges by introducing additional layers in the existing regulatory landscape. Given the fast pace at which we are seeing AI technology evolving, it is particularly important that any incremental addition of complexity to coordination is strictly necessary, and does not slow down the ability of regulators to carry out their functions. We would encourage government, where possible, to make use of existing regulatory initiatives such as the DRCF to test how existing functions could adapt in response to the challenges posed by AI, and enable further innovation and growth.

32.	Alongside our multilateral collaboration through the algorithms programme, DRCF members also collaborate and produce outputs bilaterally where useful. For example, our joint statements with the ICO and Ofcom on how competition policy might interact with data protection[17] and online safety[18] respectively demonstrate our collective ability to provide industry clarity in an agile response to relevant industry and regulatory developments.

33.	We acknowledge the need to ensure AI innovators are adequately supported and will support government in delivering a cross-regulatory AI sandbox with our DRCF colleagues. We look forward to sharing the learnings of the DRCF pilot for a similar multi-agency advice service. By August 2023, the project will deliver a report to the DRCF on whether and how to introduce a multi-agency advice service for innovators, so government may want to consider the timings of the launch of such a service to be able to make use of this information, alongside its wider consultation.

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[17] 'CMA-ICO joint statement on competition and data protection law' (2021)

[18] 'CMA-Ofcom joint statement on online safety and competition' (2022)