HM Government

UK Government Response to EU public consultation on Digital Platforms

Including the regulatory environment for platforms, online intermediaries, data and cloud computing and the collaborative economy

Consultation on regulatory environment for platforms, online intermediaries, data and cloud computing and the collaborative economy

Questionnaire

General information on respondents

I'm responding as:

The representative of an organisation/company/institution

What is your nationality?

United Kingdom

What is your name?

Alison Stanley

Please your email:

Alison.Stanley@bis.gsi.gov.uk

I'm responding as:

The representative of an organisation/company.

Is your organisation registered in the Transparency Register of the European Commission and the European Parliament?

No

Please choose the option that applies to your organisation and sector.

National administration

My institution/organisation/business operates in:

United Kingdom

Please enter the name of your institution/organisation/business.

UK Government

Please enter your address, telephone and email.

Department for Business, Information and Skills
1 Victoria Street
London SW1H 0ET, UK

(+44) 0207 215 4854

Alison.Stanley@bis.gsi.gov.uk

What is your primary place of establishment or the primary place of establishment of the entity you represent?

N/A

Contents

Annexes

Annex A: The UK's Competition and Markets Authority report into online reviews and endorsements (June 2015)

Annex B: The UK's Competition and Markets Authority report on the commercial use of consumer data (June 2015)

Annex C: HMG internal literature review on online platforms

Annex D: HMG summary of interviews with experts

Annex E: Walport Report on the internet of things (December 2014)

Annex F: The UK Competition and Markets Authority/the French Autorité de la Concurrence joint report on the economics of open and closed systems (December 2014)

Annex G: The UK G-Cloud

Annex H: Examples of industry self-regulation initiatives on illegal content

Summary of UK response

Embracing success stories

Platforms have succeeded commercially because they deliver a wide range of benefits to both businesses and consumers.

- Consumers benefit from increased convenience, greater choice and quality of services, improved transparency, 'freemium' services, increased connectivity and empowerment.
- Businesses benefit from a reduction of geographic barriers, supporting new forms of business through innovative products, more efficient services, access to wider audiences, new funding models and reduced costs.

Our first priority should be to ensure that platforms continue to innovate and offer services consumers and businesses demand. The UK rejects any form of regulation that would undermine the advantages noted above.

Platforms are everywhere

We shouldn't create laws specifically for platforms, but platforms shouldn't be above the law. To attempt to define a set of characteristics as varied as those listed in the Commission's consultation is an impossible task. A platform could offer a physical good or an intangible service. It could be based on business to business relationships (B2B), business to consumer relationships (B2C), consumer to consumer relationships (C2C) or a combination of all three. Many platforms offer services that would not be in scope under a platforms definition. We wouldn't seek to regulate freight, fridges, friendships and freedom of speech in one single instrument, under a single definition and should not begin to do so now, simply because platforms share some common characteristics. The list of services covered will continue to grow as the technology proliferates.

We do not see many policy questions that are exclusively limited to platforms. Where questions do arise, they are relevant to a subset of platforms. Therefore the EU should avoid using any attempt to define platforms as the basis for any regulatory action.

Challenging our assumptions

These new business models challenge existing ways of doing business and empower consumers with unprecedented levels of knowledge about individual markets. Through networks, they are offering new answers to many of the challenges which previously we looked to regulation to tackle; such as how to hold traders accountable for the goods they sell (through review mechanisms) or how to maintain

effective choice for consumers (through lowering the barriers to entry for new businesses).

The need to have appropriate rules for how markets work will always remain, but platforms encourage us to think again about how to ensure these are proportionate and fit for the next few decades for all businesses, whether they have the characteristics of a platform or not.

We should look at platforms in the context of the wider economy and what lessons they teach us for how we can ensure all of the EU acquis is ready for the challenges of digital transformation.

Benefits for all businesses

Platforms are no different from other businesses. And as with other businesses, there may be competition issues with specific companies, or in specific markets. We welcome these issues being addressed, either individually or through sector enquiries. It is important that any competition investigation involving a platform looks at both sides of the market that it operates in, to provide a full assessment of competition and the deal consumers are getting. Platforms often face a much greater degree of competition than at first appears.

In sectors where supply side competition is not found to deliver optimal market results, there may be a case to consider additional tools beyond those already available to enforce against abuse of dominance. However, there is insufficient evidence at this time for the UK to support such a position.

The UK calls on the Commission to launch competition investigations into sectors where potential problems are identified, before taking any further action.

A competitive market

The competition regime is an effective way to address abuse of market dominance, which lies at the heart of several issues in the consultation. An assessment of competition in online service markets should underpin an analysis of whether the competition framework meets the needs of the data-driven economy.

For the competition regime to best support the online ecosystem, it needs to move faster. To help achieve this, the Commission should look to enhance their information-gathering powers and streamline the competition enforcement system, whilst being minded to avoid additional burdens on businesses or undermining the current regime.

To deal with fast changing markets, we need a fast moving competition system. More timely conclusion and enforcement of competition cases will be vital in helping us better respond to competition issues online. Competition policy should be used to prevent abuse of market dominance, and not to shield businesses from their competitors.

Illegal Content

Platforms, like all businesses, must act in a socially responsible manner and be reasonable and timely in their cooperation with law enforcement authorities and in the removal of illegal and copyright-infringing material, without harming freedom of expression. Safeguarding public security, preventing the promotion of terrorism, keeping children safe online, stopping fraud and protecting rightsholders are essential.

Clearer framework for collaboration

Many of the issues raised throughout the consultation will apply equally to collaborative and more traditional platforms. However, the new business models throw up interesting challenges with regards to the application of existing social and economic rules. We welcome the Commission's commitment to publish guidance on how existing Single Market rules, including the Services Directive, apply to the collaborative economy, and would welcome further clarification of existing legislation to increase legal certainty for companies in this sector.

The EU should seek to clarify how existing EU legislation applies to the collaborative economy, and look to ensure that these rules are fit for a digital age and that barriers to innovation, start-up and scale-up are removed.

Transparency of online platforms

Transparency empowers consumers and promotes the development of trust between parties. As such, transparency is an important mechanism that encourages competition without the need for burdensome regulation. Consumers require access to the information required by consumer law in order to assert their rights and to play an active role in markets.

All businesses already have an incentive to act in a transparent and trustworthy way. Businesses which systematically mislead or hide information from their customers will not succeed in business for long. Those businesses that use transparency to foster relationships between themselves and buyers will attract and retain customers.

Transparency is particularly relevant to online businesses and there are already legal obligations for platforms to be transparent under the Consumer Rights Directive and the Unfair Commercial Practices Directive.[1] For example, when a consumer buys from a trader at a distance, including online via a platform, the trader must provide certain pre-contractual information, including the identity of the trader and their geographical location details. We would interpret this to include platforms, whenever the platform acts as a trader in the course of its business. There is therefore already suitable EU legislation in place to provide a high level of clarity to consumers on who they are contracting with when they buy goods, digital content or services online. Any current failures of awareness can be addressed through implementation or enforcement of the existing regulations – we do not see a need for new regulation.

All businesses should be encouraged to provide relevant information to consumers in a clear and easily understood way. HMG has developed non-regulatory methods of encouraging transparency, including a voluntary scheme for traders to provide point of sale information to customers to inform them of their rights under the 2015 Consumer Rights Act. We chose not to make such a scheme compulsory, as we concluded that traders are best placed to decide how to present the information to their own customers.

There is also evidence that few consumers read and understand terms and conditions. HMG has therefore asked the consumer group Which? to work with leading, consumer-facing businesses to review the way they present their terms and conditions, in particular online. HMG welcomes this Which? campaign, and expects businesses to work positively with Which? to find an approach that will ensure that companies display key terms and conditions information upfront, clearly and succinctly. This should make it easier for consumers to understand what they are signing up to when they make a purchase.

[1] Implemented in the UK in the Consumer Contracts (Information, Cancellation and Additional Charges) Regulations (2013) and the Consumer Protection from Unfair Trading Regulations (2009)

Reliability of reviews and reputation systems

Reviews are a valuable resource for consumers, enabling them to make more informed choices. According to a report by the UK's Competition and Markets Authority, £23 billion a year of consumer spending is potentially influenced by online reviews. The report also found that consumers value and are influenced by online reviews; that they are used by more than half of adults in the UK; and that consumers are largely satisfied with the information provided by reviews.[2]

The effectiveness of reviews depends upon whether they are trusted by customers and are reliable. It is also in the wider interests of platforms that reviews are accurate, both for reputational reasons, and also to allow them to improve their efficiency and the quality of user experience. Some existing online practices, including fake reviews, the 'cherry-picking' of positive reviews, and failure to clearly identify advertising as being sponsored content undermine the potential value of reviews. We therefore support measures to combat dishonest practices which would detract from consumer confidence.

There are a number of practices such as fake reviews and cherry-picking reviews that may not comply with the law in the UK as they represent a breach of the Consumer Protection from Unfair Trading Regulations 2008 (CPRs) and the UK Advertising Codes. This implements the Unfair Commercial Practices Directive which applies to platforms whenever it acts as a trader in the course of its business. More effective enforcement is likely to be more appropriate than the introduction of new regulation where there are existing consumer protections in place. This can be achieved through cooperation between Member States and international organisations such as the International Consumer Protection and Enforcement Network (ICPEN) and the CPC network.

There is also evidence that companies who rely on customer reviews for their business model will take action on their own behalf in order to combat practices such as fake reviews. Amazon announced in April 2015 that they are developing a machine-learning algorithm to identify fake reviews and minimise their effect on overall product ratings.[3] Amazon also announced that they are suing several websites (in April 2015) and 1,114 individuals (in October 2015) who are alleged to have been selling fake reviews to be placed on the Amazon website.[4]

HMG would therefore not favour new EU regulation in this matter without convincing evidence of its necessity and carefully examination of its potential impact. This is in particular due to the fact that such regulation can have unintended consequences which can sometimes entrench the very lack of competition which they were designed to prevent. In particular:

---

[2] For the full report, see annex A.
[3] http://www.cnet.com/news/amazon-updates-customer-reviews-with-new-machine-learning-platform/
[4] http://www.bbc.co.uk/news/technology-34565631

- **Competition**: websites specialising in product reviews are likely to compete for customers based on the quality and trustworthiness of their reviews. Introducing regulation without a thorough and evidence-based understanding of the complete workings of the market risks reducing this competition.
- **Barriers to entry**: Excessive regulation which makes it harder for businesses to display reviews may act as a barrier to entry (as larger, established businesses are more likely to be able to afford the cost of compliance) reducing consumer welfare in the long run. It may also restrict the ability of firms to innovate and create better or more efficient business models.
- **Sponsored search results**: So long as it is clear which search results are sponsored, there is no evidence that allowing businesses to pay for click-throughs is damaging to consumer welfare. In many cases such links will efficiently guide consumers to the appropriate web page.

Use of information by online platforms

Use of consumer data can be of benefit to both businesses and consumers: the former may increase sales, productivity, efficiency or profitability, and the latter may receive new, improved services or lower prices. Consumers may even trade their data for a direct financial gain. The Warsaw Institute for Economic Studies (2014) has estimated that by 2020 big and open data could improve European GDP by 1.9%.

The area where the use of data by online platforms could be improved upon lies in increasing transparency, as suggested by a 2015 report by the UK's Competition and Markets Authority (CMA) on the use of consumer data (annex B). The report found that increasing collection and use of data is providing significant value to consumers, as businesses respond to direct or indirect consumer feedback and make operations more efficient. For this value to keep being generated, consumers need to agree to continue providing their data, which is dependent on maintaining their trust.

The CMA report suggests that consumers lack understanding of how their data is used. Although the consumers interviewed appeared to have generally high levels of awareness of data collection, their knowledge of how their data was being collected varied widely: 85% recognised that registering their details and opting whether to receive marketing from first party companies was a way in which firms collected their data, whereas only 45% were aware that mobile apps can collect personal data.[5] Improving transparency and customer awareness of online data collection and how it is used would lead to increased consumer confidence and a better-functioning market.

The CMA report concluded that consumers should be informed of (and given the choice about) when and how their data is collected and used. Consumers should also be informed about how companies manage data privacy, allowing them to select the firm that best meets their preferences, and encouraging the development of privacy rights through competitive market forces. Currently this is not something which features prominently in the market, largely due to consumers being unaware of the value of their data. Competition over privacy would be a useful indicator of companies' willingness to adapt to consumers' wishes, of consumers' comprehension of the use of their data, and of the effectiveness of competition in the market.

Further to raising consumer awareness of their data and its value, we should also be looking to encourage more active engagement by consumers. For example, they could utilise existing provisions to switch their data from one provider to another, or

[5] See report at annex B a more detailed breakdown of figures.

even make direct financial profit through auctioning their data (e.g. through Personal Information Management Systems).

The CMA report investigated whether firms use consumer data in ways which might be detrimental to consumers. They found some instances of targeted price discounts (e.g. loyalty schemes in grocery retailing), but no evidence of consumers suffering detriment from such discounts. A report by the Office of Fair Trading in May 2013 suggested that personalised pricing is less likely to be harmful if consumers know that it is happening, understand how it works and can exercise effective choice.[6] The potential for harm arises where there is a lack of consumer awareness; where repeat purchases cause price changes from one day to another, without consumer knowledge; and where lack of trust causes a reduction in demand online.

The GDPR, when agreed, will give consumers more control over how their data is to be used. HMG believes that any further action around the use of data by online platforms should be light-touch, aimed at increasing transparency on data collection and use, raising consumer awareness, and encouraging greater data ownership. Healthy market competition should lead to both a strong digital economy and more effective consumer privacy. Any non-compliance with existing regulation should be tackled proportionately and effectively, to increase confidence and fairness amongst businesses and consumers.

[6] The economics of online personalised pricing, Office of Fair Trading, May 2013 http://webarchive.nationalarchives.gov.uk/20140402142426/http:/www.oft.gov.uk/shared_oft/research/oft1488.pdf

Relations between platforms and suppliers/application developers or holders of rights in digital content

HMG has conducted multiple stakeholder discussions with businesses and with academic specialists on this subject, and has also carried out extensive analysis of business to business relationships. The following position has been modelled on this information.[7]

Studies and consultations carried out by HMG indicate that focusing on specific examples of relationships between businesses and platforms may not capture the effects of platforms on the market as a whole. Our findings indicate that sometimes an apparent lack of balance between the sides in a transaction (e.g. a platform and a business) may be indicative of a market that is working effectively and open to competition.

These findings are set out in more detail in annexes C and D. They suggest that:

- Competitive effects in two-sided markets are complex and the same practices can have very different effects in different markets. Judging whether these effects are harmful requires detailed and specific assessment rather than wide-ranging legislation. For example, an apparently exploitative position on one side of the market can benefit consumers and be good for overall economic efficiency if there is effective competition. For example, if platforms are in high competition with each other for potential customers, pricing or terms may be favourably skewed towards consumers at the expense of users on the other side of the market (suppliers). If there is competition, this is efficient and the interests of the platform will coincide with those of society. We must therefore be careful in looking only at one side of the market when deciding if there is a competition issue.

- The two-sided nature of platform markets, as well as their high level of dynamism and uncertainty, means that leading players may face considerably more competitive pressure than is at first apparent.

- Platforms have created a huge amount of consumer value by reducing costs and increasing choice and access to information. This value has been generated through high-risk innovations. The introduction of new regulation, particularly the introduction of mandated standards, is likely to make it difficult for platforms to innovate in the future, and can also act as a barrier to entry.

[7] Full details can be found in annexes C and D.

- Given this high level of risk associated with platform innovations, it is important that there is an opportunity to make significant profits in the case of success in order for platforms to attract investment.

In a situation where there is an absence of competition, practices may arise which are exploitative or otherwise abusive to consumers or other market players. Intellectual property rights owners have also claimed that some platforms are abusing exemptions from liability, to allow them to derive value from copyright content without paying anything to the rights holders, or to give them an unfair advantage in licence negotiations. This issue is covered in more detail in the '*tackling illegal content online'* section below. However, given the complex and varied nature of the platforms market identified above, it is crucial to judge the effects of each situation individually and carefully before an intervention is made. The current competition framework provides the appropriate tools for this situation, as a full competition assessment demands an analysis of the market in question before interventions are made. Should this consultation process highlight examples of sectors in which the role of 'platforms' could be considered anti-competitive, we would welcome further competition analysis undertaken by the EU.

An example from the UK, the introduction of a Groceries Code and a Groceries Code Adjudicator after a competition assessment, is discussed at the end of this section.

The UK is keen to consider how to speed up the process of competition decisions, or to mitigate the effects of the length of time it takes to make decisions, whilst being aware of any costs to changes in the way competition law is enforced. However, HMG would oppose the introduction of new regulations beyond the application of the competition framework. Regulations that look to distribute rewards more 'fairly' risk reducing incentives to innovate and may act as a barrier to entry, reducing competition and consumer welfare in the long term.

The Groceries Code and the Groceries Code Adjudicator: An example from the UK

It is, of course, possible for there to be buyer power in markets and for this to be damaging. For instance in the UK grocery market, the UK Competition Commission (now the Competition and Markets Authority) found that excessively putting risk and unexpected costs onto suppliers could be damaging to consumers in the long run by undermining investment and innovation by suppliers.[8] The Competition Commission therefore established a Groceries Supply Code of Practice covering grocers with a turnover over £1bn and their direct suppliers. The code requires the grocers to at all times deal with their direct suppliers fairly and lawfully. Fair and lawful dealing is be understood as requiring the grocer to conduct its trading relationships with suppliers

[8] http://webarchive.nationalarchives.gov.uk/20140402141250/www.competition-commission.org.uk/our-work/directory-of-all-inquiries/groceries-market-investigation-and-remittal/final-report-and-appendices-glossary-inquiry

in good faith, without distinction between formal or informal arrangements, without duress and in recognition of the suppliers' need for certainty as regards the risks and costs of trading, particularly in relation to production, delivery and payment issues. In 2013, the Government set up the Groceries Code Adjudicator to monitor and enforce the Code.

This intervention was made after a thorough investigation of competition in the market by the competition commission. In scope were only competition issues and their effects on consumers. We would therefore call on the Commission to maintain the principle of complete market investigations looking purely at the competition issues before intervening. As shown in the UK groceries market, this approach can lead to robust interventions where appropriate.

Negative constraints on the development of platforms

Discussions with UK stakeholders have highlighted the following as major constraints which negatively affect the development of their online platforms:

- **Lack of a unified market for sales**: Technology companies have highlighted difficulties they face in growing and expanding into wider EU markets, due to barriers which still exist in relation to employment law, tax, business registration and access to finance.
- **A need for legal clarity**: Businesses need legal clarity about what is and what is not permitted in order to allow them to plan for the future, and to give confidence to investors.
- **Self-regulatory bodies**: Technology companies are asking for clarity on whether self-regulatory bodies are officially recognised, in order for then to be effective and reliable, and worth the cost of setting them up.
- **Access to data**: Technology companies speak highly of the "permissive but accountable" attitude to data in US markets, where there are fast and effective routes to redress in the case of misuse of data. These companies argue that the properly protected use of data will be vital to future technological innovation, and that EU companies are being disadvantaged in relation to their US competitors by EU attitudes to the regulation of data.
- **The EU attitude to platforms**: The UK technology company stakeholders we spoke to emphasised how the EU had the potential to be a hugely innovative, profitable and successful site for the development of platforms. They were frustrated that early excitement about the potential of the Digital Single Market in the EU seemed to be descending into a view of platforms as being problematic rather than new and innovative business models that bring benefits to consumers and other businesses alike.

Constraints on the ability of consumers and traders to move from one platform to another

HMG has highlighted that in some specific markets (energy, telecommunications and banking), consumers should have access to their data in a format that can be easily re-used and should be able to authorise third parties such as comparison sites to access their data to help them to switch between businesses.[9] These are markets characterised by low levels of consumer switching, where consumers are limited to one primary supplier of the service (i.e. they cannot use simultaneous suppliers) and this results in a lack of competitive pressure in these markets. We lack strong evidence that platforms suffer from similar problems. Consumers can and do use more than one platform simultaneously; the OECD have found that consumer switching between platforms has a low cost; and levels of new consumers entering the markets are high, providing sufficient competitive pressures. Switching should be considered as part of a wider competition assessment; some barriers may not be problematic if there are competitive pressures elsewhere.

In principle we agree that consumers should be able to retrieve their data within the agreed boundaries of the General Data Protection Regulation. Beyond that, the technical feasibility and cost to platforms of providing data in a suitable format must be considered; if the cost is high this will become a barrier to entry, thus reducing competition and consumer welfare.

In their 2015 report on consumer data (attached as annex B), the CMA found that a full competition assessment is needed to understand whether given practices generate genuine competition concerns in individual markets. They also confirm that their existing tools would be sufficient to address any concerns. One potential issue which has been raised is the time taken for competition decisions to be made. More timely conclusion and enforcement of competition cases will be vital in helping us better respond to competition issues online.

Our internal research also identified other risks of intervening; for example, if platforms are forced to share their data this may dis-incentivise them from finding innovative ways of collecting and analysing data in the future. It could also force them to store data in particular ways, making the collection or analysis of data more difficult, and harming their ability to innovate. In the long term, reducing platforms' innovation will reduce consumer welfare. These risks should be taken into account before any intervention is made.

[9] For example, in the "midata" initiative, the UK's largest banks voluntarily provided consistent data to customers so that they could use it to compare prices.

Our research also considered whether suppliers should be able to ‘port’ reputations between platforms. The findings again emphasised the importance of a broader competition assessment. The research identified three specific risks of intervening:

- platforms may reduce efforts to get their customers to leave reviews if they cannot capture the value of those reviews;
- reviews may partly reflect the service offered by the platform and therefore platforms may free-ride on the service offered by other platforms; and
- traders may be able to game the porting process by porting only their best reviews.

As noted above, an intervention enforcing common standards may result in a reduction in the incentive or ability of platforms to innovate. As such it should be subject to careful evidence-based consideration before any proposals are put forward.

Access to data

HMG encourages openness and transparency from online platforms with regards to accessing their services and the data that has been shared with them.

Developers need stability and reliability on which to build value added services from platforms. Openness and transparency are in platforms' best interests when building trust in technology ecosystems. There is evidence that this is being reflected in the market; for example the recent case of Twitter retiring its API v1 to be replaced by API v1.1, a version which imposed usage restrictions on some apps. This caused outcry among developers in its ecosystem, and ultimately damaged Twitter's reputation and profitability. It led to Twitter issuing an apology and putting in place measures to try to attract developers back to its platform so that its content could reach wider audiences.

HMG encourages openness and transparency from online platforms with regards to accessing their services and the data that has been shared with them. HMG would, however, urge an accurate evidence-based assessment of whether topics addressed in these consultation questions are real market problems that require regulatory action, or whether they are symptoms of healthy creative disruption and competition. Should the results of this consultation identify genuine market failure – and here, we refer specifically to terms and conditions practices – then it is in consumer legislation, which applies to all businesses, that these problems should be dealt with, and not in separate platforms regulation.

Rating Schemes

When considering the introduction of rating schemes for platforms, it is important to distinguish here between rating schemes, seals and user reviews. Seals are usually supported by a regulatory body and monitoring process, whereas rating schemes are simply informative (for example, the UK's energy efficiency rating scheme). User reviews have been shown to be effective in sales (as discussed in the section on Transparency of Online Platforms). For example, according to an iPerceptions survey in 2011, 63% of customers are more likely to make a purchase from a site that has user reviews.

Outside of user reviews, HMG is sceptical that a government-led rating system would increase trust in platforms, as we think that behaviour, principles and brand reputation (amongst other factors) are also likely to play an important role. Furthermore, given the complex nature of platforms and the difficulty in providing an appropriate definition, a universal rating scheme would be difficult to put into place. We believe that the most effective actions in the area would be market-led, and we would need to see significant evidence to the contrary to support any intervention in this area.

Tackling illegal content online and the liability of online intermediaries

HMG believes that the exemptions from liability regime, part of the eCommerce Directive (ECD - Art 12-15) has succeeded in fostering an open and innovative internet by providing online services with the legal certainty required to start up and in many cases flourish. Nevertheless, the internet has changed dramatically in the years since the Directive was agreed and we support the need to review its functioning in the current era. To begin with, the Commission should clarify the terms used in the Directive: for example, what constitutes “actual knowledge”? What does hosting mean in the 21st century? It should also clarify which types of online businesses fall under each of the three categories contained in the Directive e.g. hosting, mere conduit or caching. Consideration should also be given as to whether the distinction between “electronic communications service providers” and “information society services” is still appropriate. As part of this exercise, the Commission should also take into account all of the Court of Justice for Europe rulings applicable to this area. Additionally, any obligations should be applied equally to newly defined intermediary services, as to any other service provider. Below is the HMG response on both a possible duty of care and notice and takedown initiatives.

Duty of Care

HMG is concerned about the proliferation of illegal activity online. The organisation of terrorist activity, and the threat that this poses to the safety and security of citizens, is a particular concern, as is child sexual exploitation. HMG would welcome industry being further incentivised to take more responsibility for the content on their networks. Therefore, the Commission should explore whether a duty of care should be applied directly to industry to allow them to detect, prevent and report certain types of high-threshold illegal activity in respect of specific types or categories of activity – especially content that breaches their own terms and conditions. We would also like to suggest the following:

- the reporting associated with any duty of care should be made directly to the relevant investigating authorities;
- we would welcome a consideration by the Commission as to whether current approaches provide sufficient clarity on the responsibilities of businesses to cooperate with law enforcement authorities;
- any changes to the framework should not permit online intermediaries to ‘avoid’ obligations which should apply to them.

Several industries have argued that the current regime has negatively affected their sectors. For example, in the UK, the music industry in particular would like to reform the ‘exemptions from liabilities’ as it applies to copyright material. Music industry

representatives claim that the existence of the protections allows legitimate hosting platforms to negotiate lower royalty rates for licensed content. If terms aren't agreed to license the content, it is claimed, the hosting platforms can use the fall-back position of ECD safe harbour to continue hosting (and benefit financially from) any copyright material they haven't been specifically notified about. Clarification of terms used in the Directive would, we believe, help to address these concerns.

On notice and takedown

Different categories of illegal content require different responses by online intermediaries. HMG believes that content related to child sexual exploitation, content containing incitement to and the promotion of terrorism, and content which presents a risk to public security should receive priority treatment.

Notices should also contain sufficient information for the recipient to make a reasonable determination of the validity of the request and to act on it expeditiously. We believe that the format and content of notices is best developed between relevant parties. For copyright material, it is also sometimes the case that providers of content are able to rely on certain exceptions to substantive copyright law. For expediency this opportunity should be provided through a counter-notice system rather than in line with the initial takedown process.

We should not be too prescriptive about takedown as it is one of many responses to illegal content and by focusing on this alone, we may prohibit what both industry and Governments do in respect of filtering, blocking, monitoring and reporting in tackling illegal content.

If the content is clearly illegal and breaches the terms and conditions of the site, then action should be taken against it. However, we recognise that there may be more complex cases, such as defamation or copyright infringement, where there is a stronger case for allowing the online intermediary more time to study the notification, seek legal advice, and so on. In such circumstances, we recognise there may be a stronger case for allowing a content provider to give their views.

The UK Government is in agreement that hosting providers and businesses could begin to develop systems that allows for one takedown notice and stay down for as many types of illegal material as possible. However, in the short term, we look to platforms to focus on the removal and stay down of incitement to and the promotion of terrorism material, and child sexual abuse images.

The UK Government understands the technological difficulties with any kind of notice and stay down system for copyright, and are mindful that obligations in this area should not become a barrier to entry, whether technological or in terms of resource commitment. We believe, however, that there is scope for the current system to be improved to allow rights holders to more effectively protect and legitimately exploit their copyright, and that options for this should be explored. One option might be an enhanced requirement to provide sanctions against uploaders of frequently notified material.

This is an area where technology has developed considerably in recent years. Systems like YouTube's Content ID show how platforms with the right resources can develop automated solutions that allow them to proactively remove infringing material from their platforms. It is important to be careful, however, not to mandate solutions which require smaller or start-up companies to provide similar levels of resource.

UK Voluntary Initiatives

Please see the attached annex H for details of two examples of UK voluntary initiatives to remove certain categories of illegal content from the internet: the Internet Watch Foundation (IWF) and the Medicines and Healthcare products Regulatory Agency (MHRA). The IWF, an independent organisation funded primarily by the internet industry itself, works closely with internet companies to remove or block indecent images of children where they appear. The MHRA is an Executive Agency of the Department of Health, responsible for the regulation of medicines on the UK market. It offers advice and warnings about buying medicines online and leads an international initiative to tackle the illegal online supply of medicines.

Free flow of data: On data location restrictions

HMG supports the European Commission in tackling data location restrictions, which run counter to Single Market principles. Such restrictions can be based on poor or one-sided economic analysis, surreptitiously designed to impede foreign competitors; in fact, the economic losses (due to detrimental effects on businesses and consumers) are likely to outweigh any benefits. Recent analysis suggests that newly enacted and proposed data localisation requirements (and related data privacy and security laws that discriminate against foreign suppliers) have reduced EU GDP by 0.4%.[10] In general, we believe unnecessary restrictions imposed by Member States should be removed, in line with better regulation principles.

This is a complex area and we would encourage the Commission to conduct further research in order to better understand what barriers exist. A 2013 report found that some legal data restrictions, which required certain types of data to be stored within a jurisdiction, did allow for copies of the data to be stored or accessed from outside the jurisdiction.[11] In many cases it is not national laws that restrict data flow, but rather users' wishes. And while data location restrictions can be a barrier to the free flow of data, there are other, arguably bigger, factors that should be considered in any future initiatives. This was reflected at a Commission-led workshop in 2014, which intended to look at data location restrictions, but in fact focused on the wider barriers (e.g. data security) to use of cloud computing. Many of the issues highlighted in this section of the consultation are the same as those affecting the uptake of cloud computing services – security and privacy, risk of service failure – and therefore the work being carried out by the Cloud Select Industry Groups should be helpful.

It is important for consumers and businesses to make informed decisions when choosing a cloud provider. They should not assume that storing data in a particular location will improve the security of that data, but instead select providers on the basis of the security standards to which they adhere (see UK G-Cloud example in annex G).

Therefore, rather than potentially regulating, we would encourage Member States to use existing instruments to support the free flow of data where possible, in line with better regulation principles. For example, the EU-Canada Comprehensive Economic and Trade Agreement seeks to allow the free transfer of non-personal financial data, through Article 14 of Chapter 15 (Financial Services) which states that "each Party shall permit a financial institution or a cross-border financial service supplier of the other Party to transfer information in electronic or other form, into and out of its

[10] ECIPE (2014): The Costs of Data Localisation: Friendly fire on economic recovery; European Centre for International Political Economy, Occasional Paper No.3/2014.
[11] The 2013 DeBrauw et al report on Data Location & Access Restriction

territory, for data processing where such processing is required in its ordinary course of business."

UK Government example

HMG has been putting these principles into practice. As a consumer of cloud services, we have a Technology Code of Practice which covers the handling of personal data as follows:

"Make data open by default, while minimising and securing personal data, or data restricted for national security reasons. Public data should be proactively published in a manner consistent with the Open Data principles: structured, machine-readable, and discoverable through data.gov.uk. Users should have access to, and control over, their own personal data."

When building digital services we evaluate what user data and information the digital service will be providing or storing, and address the security level, legal responsibilities, privacy issues and risks associated with the service.

On data access and transfer

The UK would support the EU regulating on the free flow of data with strong evidence of necessity and proportionality (see previous answer to 'Free flow of Data: On Data location restrictions'). This is not a market that works in a single, clearly defined way. There are a wide range of interacting technical solutions, and current trends suggest that this is likely to remain so for the near future. These solutions are also continuously changing. It is thus difficult to envisage a regulatory approach that would have tangible impact and be future proof in these circumstances.

On the subject of non-personal data generated by a device in an automated manner, there is currently no evidence that there is a need for special measures. However, we would highlight the potential difficulty there can be in distinguishing between personal and non-personal data in this situation. For example, some auto-generated data may appear non-personal, but will give rise to personal information if aggregated, e.g. if monitoring electricity consumption over a period of time, it is possible to identify when a house is empty or occupied.

We believe, however, that this problem is dealt with by the precise definitions of 'personal data' and 'data subject' in the General Data Protection Regulation, which provided they are adhered to, demonstrate a legislation that is fit for purpose without further measures for non-personal data being required. In the case of the latter, given that this is such a nascent market, there is a danger that all the benefits of big data, data analytics, and the Internet of Things will be impeded if regulation occurs too early, and is too inflexible and all-encompassing.

Premature regulation might have the unintended consequence of preventing the development of a form of technology which could have huge benefits for consumers and businesses. If a problem does become apparent, any proposed solution must be driven by markets and consumers, based on strong evidence, and the legislative mechanism for a solution must be transparent and clearly defined.

On data markets

In developing HMG's position we have drawn on the June 2015 CMA report on the commercial use of consumer data (annex B), as well as more lightly on internal research we have conducted on digital platforms (annex C).

The CMA report expressed concern about the current inability of consumers to make informed choices on data sharing and privacy settings rather than on the issue of regulations acting as a barrier to entry. However, the CMA report also highlighted the importance of avoiding excessive regulation and of regulations encouraging market competition where possible. This supports the findings of our internal research on platforms, which found that prescriptive regulations may harm innovation or act as a barrier to entry. The CMA report also highlighted the importance of international coordination on data regulation, for instance through the OECD.

The CMA report finds that data protection regulation can help the functioning and outcome of the market by building consumer trust. If consumers are informed they are willing to share their data if it is in their interests, allowing it to be collected and to generate value. More directly, regulations that give greater transparency and choice to consumers may enable them to make more informed and better choices, allowing firms to compete on non-price factors such as data protection and privacy.

In their call for information prior to the report, the CMA received a few high level comments that complying with data protection and privacy laws add cost and act as a barrier to entry. HMG, and the CMA, believe that these regulations are necessary to protect consumers and are partly designed to prevent firms which are not able to adequately protect consumers from entering the market.

HMG has greater concerns that new regulations have the potential to hinder this market than we do in relation to the effects of current regulation. As noted above, our internal research on platforms has highlighted the risks of interventions on the market for data and on other markets. Excessive regulatory interventions in personal data management, access to data, or platform/supplier relationships may undermine innovation in data markets and act as a disincentive to the collection of data.

On access to open data

Public Sector Data

There are strong benefits to opening up public sector data for re-use when appropriate. The UK already has an 'open by default' policy in the way access policy leads into re-use and Open Data. Similarly, the UK has the third version of the Open Government Licence (OGL), interoperable with Creative Commons, and a licencing framework/good practice policy that bolsters government open data through the management of crown copyright. HMG believes that it will be most effective for these issues to be managed through Member State actions rather than via an EU standard licence, and would be in favour of sharing best practice and ideas on this subject at a Member State level, or through further discussions at the Commission's bi-annual Public Sector Information (PSI) Officials Group.

HMG would not support the expansion of the scope of the Directive on the Re-use of PSI. We did not support an overly-prescriptive set of technical standards in the PSI negotiations and would not welcome common data formats. As discussed in more detail in the section on “relations between platforms and suppliers”, one of the key findings of economic research carried out by HMG (see annexes C and D) was that regulations on how platforms are allowed to interact with third parties, such as mandated standards, may harm their ability to innovate in the future. It may also act as a barrier to entry, reducing both consumer and total welfare in the long run.

We are also wary of introducing remedies for potential re-users against unfavourable decisions. The new redress mechanism introduced in the amended PSI Directive has not yet been tested and it is as yet too early to introduce new remedies.

Private Sector Data

HMG is committed to encouraging private sector entities to open up data where there is a defined need and beneficial reasons for doing so, and when it is in the public interest: for example, for transparency and accountability reasons.

Internationally, the UK has encouraged the publication and beneficial re-use of private sector data. For example, the UK has used its prominent role in the Open Government Partnership (OGP) to encourage the widespread adoption of the International Aid Transparency Initiative and the Extractive Industries Transparency Initiative. The Prime Minister used his speech in Singapore this year to highlight UK efforts to encourage the open and transparent publication of data in order to fight corruption.[12] The UK has strongly supported the development of the beneficial

[12] https://www.gov.uk/government/speeches/tackling-corruption-pm-speech-in-singapore

ownership register that requires companies and other legal entities incorporated in EU member states to keep a register of beneficial owners from summer 2017.

The UK's focus on open contracting aims to ensure that all private sector bodies providing a service to government are required to publish the same level of transparency data as required by any public sector entity. For example, the 'Contracts Finder' service allows anyone to search for information on contracts awarded by government over £10,000.

The UK has also passed legislation to make companies open up their data. For example, the Modern Slavery Act requires any company with significant business dealings in the UK to publish transparency data about the labour practices of all organisations in their supply chains.

On access and reuse of (non-personal) scientific data

There is wide agreement that there are clear benefits to making (non-personal) data generated by research more accessible, identifiable and re-usable. However, more evidence is needed about the most efficient and cost-effective way to achieve this. Any suggested innovation will also need to be proven to create benefits meriting its costs. HMG would not wish to intervene at an EU level without strong evidence that the policy in question would be effective and appropriate. It seems likely that co-operative progress between Member States and stakeholder groups will be more effective than an attempt to impose a uniform solution.

The research community have already made progress in this area in the UK. For example, a multi-stakeholder working group in the UK is currently finalising an open research data concordat, to be published later this year. This concordat was developed by co-operation between groups including Research Councils UK, Jisc, the Wellcome Trust and Universities UK. It aims to ensure that the research data gathered and generated by members of the UK research community is made openly available for use by others when this is legally and ethically feasible.[13]

The UK also aims to better align the existing policies of funding bodies in the UK in order to facilitate the shift to increased open access of both publications and data. UK Research Councils already specify data management plans as a condition of grant awards and good practice is developing in this regard.

HMG would not support the introduction at EU level of a default 'one size fits all' policy to make data generated by publicly funded research available through open access. Any such common policy would carry potentially significant cost implications for Member States, including the cost of professional implementation, infrastructure investments, curation and maintenance costs. Instead, HMG would support transnational co-operation on good practice between Member States in order to increase the accessibility of research data. Member States should be encouraged to incrementally increase open research data whilst retaining flexibility in keeping with their national circumstances.

[13] http://www.rcuk.ac.uk/research/opendata/

On liability in relation to the free flow of data and the internet of things

The Internet of Things (IoT) is a transformational technology. It will boost productivity, improve public health, increase efficiency of transport, reduce energy consumption and improve people's quality of life. Governments should encourage its development by allowing innovation and approaching any regulatory issues that arise in a targeted way. This consultation focuses on online platforms, whereas the Internet of Things is a much wider topic. The UK would urge against broad-brush regulation which does not take into account the variety of operators and applications in this area.

Research commissioned by HMG highlighted the need for legislation to be kept to a minimum to facilitate the uptake of the Internet of Things.[14] With regard to liability and IoT, HMG has not seen strong evidence to support the idea that current legal frameworks are having an adverse effect on consumers' use of IoT, except in the one specific area of autonomous vehicles. In this case, a UK business report into connected and autonomous vehicles makes it clear that existing laws concerning manufacturer defects are largely suitable for determining liability in an accident involving a car with a degree of autonomy.[15] However, a framework for determining liability on the transition of control from the vehicle to the driver of semi-automated technology would provide further clarity. The UK stresses that autonomous or connected vehicles should be treated as a separate issue, and not as an extension or add-on to the Internet of Things domain.

The UK Government believes that the question of liability in the Internet of Things should not be considered a unique discussion, separate from liability in other areas, since liability issues arising from the IoT are not materially different from those in other areas and we have seen no evidence that they would not be covered by existing consumer protection law.

In relation to the Internet of Things legal framework and trust concerns, a report by Sir Mark Walport, the UK Government's Chief Scientific Adviser, argues that while people are likely to distrust new technologies at first, in the future the issue will be less about trusting the technology and more about trusting individual companies and public sector providers.[16] We believe this trust will come with greater transparency and improved security. Government and industry should therefore work together, at national and international levels, to agree best practice in this area.

---

[14] See annex E.

[15] http://www.smmt.co.uk/wp-content/uploads/sites/2/CRT036586F-Connected-and-Autonomous-Vehicles-%E2%80%93-The-UK-Economic-Opportu...1.pdf

[16] Attached as annex E.

Overall, in line with the recommendations made in the Walport report, the UK believes that legislators should “develop a flexible and proportionate model for regulation in domains affected by the Internet of Things, to react quickly and effectively to technological change, and balance the consideration of potential benefits and harms.”

On Open Service Platforms

Our position on the question of open versus closed service platforms is based largely on a joint report by the UK Competition and Markets Authority (CMA) and the French *Autorité de la Concurrence,*[17] and also on internal economic research we have done on platforms. Much of the analysis in the CMA/*Autorité* paper leads to very similar findings to those in our internal research.[18]

Broadly speaking, the findings of the paper and our research is that it is not the case that open systems will, in every instance, be better for competition, or better for overall consumer welfare once both the competition and efficiency effects are taken into account.

Instead, the UK supports the use of the current competition framework in preventing anti-competitive practices. It is important that we maintain the principle of a full competitive assessment being conducted in an individual market before an intervention is made. We should also take into account that systems are often 'closed' due to fundamental features of the product, rather than strategic decisions, and in such cases interventions to force openness may be even more damaging. Nevertheless, open systems have the potential to allow greater interoperability of technologies, which can allow digital start-ups to scale up and enter established markets. Consequently, HMG continues to support industry-led moves in this direction.

Competitive effects of open/closed systems

Open systems have lower switching costs. A consumer is able to switch just one component to another system, rather than needing to move completely, which can be costly if it involves purchasing new hardware or losing significant data or preferences. As well as the direct benefit to consumers in being able to 'mix and match' their components, this encourages competition and innovation in each of the component markets. Such a system also has lower barriers to entry; companies need only have a better or cheaper component to enter, rather than a whole platform, which is often especially difficult in markets with strong network effects.

Closed systems run the risk of the platform exploiting the locked-in consumers; however, if there are enough new consumers entering the market or consumers switching, then the incentive to gain the marginal consumer may prevent this. In this situation there is a risk of price discrimination between locked-in and new consumers,

[17] Attached as annex F.

[18] https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/387718/The_economics_of_open_and_closed_systems.pdf

though the platform may face a reputational risk if they are seen to be exploiting locked-in consumers.

Even if the 'flow' of new consumers does not keep prices low in the market, there is likely to be intense competition *for* the market as platforms use their expected future profits to heavily discount (or improve the product) to gain a wide base of locked-in consumers. This means that any monopoly rents are effectively passed back to consumers as platforms fight to gain customers. The potential for high profits is likely to encourage innovation and entry by new platforms. This competition for the market may reduce, or even outweigh, the closure of competition in the market.

It is possible that this competition for the market process fails due to risk aversion or liquidity constraints, or simply because the market 'tips' before a dominant firm faces any competitive pressures; this can lead to the 'wrong platform' winning as in (arguably) the QWERTY vs DSK keyboards (though this is highly disputed). The market 'tipping' is where network effects ultimately lead to one player taking the whole market. For instance, the market 'tipped' to VHS after years of VHS and Betamax competing.

Finally, dominant firms are likely to favour keeping, or making, systems closed, and competition authorities should be wary of such behaviour. Competition authorities are well-placed to address these concerns.

Efficiency gains from open/closed systems

Efficiency gains from open platforms maximise network effects, as all the users on all the platforms are able to communicate, trade, or otherwise interact with one another. They also maximise scale economies, as component developers are able to develop components that fit into more than one platform. Finally, they solve hold-up problems; if component developers are only able to make components for one platform, there is a risk that the platform will 'expropriate' them, whereas if they can develop non-platform specific components, they can be more confident that no platform will have the buyer power to 'expropriate' them. This increases the incentive for component manufacturers to invest and improve the quality of their components in the future.

The first efficiency gain from closed platforms is that the platform can ensure compatibility between components. An example of this is arguably the strict quality control that Apple is able to ensure between its operating system, hardware, and third party applications. The second efficiency gain is the avoidance of free riding. In an open system component manufacturers impose an externality on the whole system if they sell low quality or poor value components: this can reduce trust in the system as a whole and unfairly affect the platform owner and other component makers. A closed system prevents this.

Finally, a closed system can avoid the drawbacks of standardisation. There needs to be some degree of standardisation for open systems to be open and compatible. However, this restricts the ability of companies to innovate, and may prevent innovative components from being compatible with the system that everyone uses.

Standardisation may also reduce total welfare if consumer preferences are especially heterogeneous or if there is a cost of ‘adaptors’ for compatibility.

In conclusion, we do not believe that Europe should mandate open or closed systems across the board at this time, which could stifle some of the benefits that closed systems may have. However, we believe that industry will increasingly chose to move in the direction of open platforms – there are already some signs that this is happening – and we support further industry-led initiatives in this direction.

Personal data management systems

In developing the UK's position on this area we have drawn on extensive internal research on online platforms, as well as on a report on the commercial use of consumer data, published by the Competition and Markets Authority (CMA) in June 2015.[19]

The findings of the CMA report are discussed in more detail in the section of the consultation response "use of information by online platforms". The report found that increasing collection and use of data by platforms and in the online world provides significant value, but that that the use of this data is dependent on the agreement and trust of consumers, which is often limited or lacking in fully informed understanding. The CMA report suggests that more flexible mechanisms to give consumers control of their data may help address some of these problems. These might include allowing consumers to choose between essential and non-essential cookies, or having different default options to allow a preference to opt-in to data sharing if appropriate.

The report also looks at personal information management services (PIMS), arguably the market alternative to these suggestions. It concludes that whilst there are a number of PIMS suppliers in the UK, usage is limited. This may be due to the two-sided nature of PIMS, which makes growth challenging as there needs to be a significant number of users on 'the other side' to make it worthwhile for either consumers or firms to use the service. If firms are lacking in engagement, or risk-averse consumers are wary of providing their data to a new intermediary, it may take time for PIMS to develop and grow. Other possible reasons may be a lack of common standards, which makes it costly to integrate data across a number of sources; or potentially PIMS are not developing due to a straightforward lack of consumer demand and low perception of their value.

HMG would cautiously consider removing some of the barriers that may be undermining the development of PIMS. HMG would not support intervention in the areas of common standards or attempts to increase demand among either consumers or firms for these services, as these well may be the result of justified or market decisions. However, if consumer demand is being held back by a lack of trust, then there may be a case for more rigorously enforcing data protection or privacy regulations in order to increase consumer trust. This is in line with the CMA report.

PIMS have so far struggled to access data held by data controllers to the extent that they can become a viable business model. There might, therefore, be an argument for intervention in markets where a level of sector cooperation is needed in relation to setting data standards. However, as discussed in more detail in the section on

[19] Attached as annex B.

“constraints on the ability of consumers and traders to move from one platform to another”, previous UK interventions have focused on regulated sectors (energy, telecoms and banking) where there has been an assessment of weak competition and it was difficult for consumers to switch providers. HMG has seen no evidence that there is a similar problem in the case of platforms, where use of multiple platforms is common, switching has a low cost, and the high number of new entrants provides sufficient competitive pressure.

There are two other substantial interventions which might be suggested at EU level, neither of which would be supported by HMG. Under the permissive option, either a service could be provided which competes with existing commercial PIMS, or subsidies could be offered to PIMS. The more regulatory intervention could involve mandating either consumers or firms to go through the publicly provided service. Alternatively, setting mandated standards in terms of data formatting or the trading of consumer data might increase the commercial viability of PIMS.

In neither of these cases is there evidence that a public, subsidised or standardised service would be more valued or trusted than a commercial one. Additionally, consumers might not welcome restrictions on how they use their own data in the short term. In the longer term, as discussed in the section on “relations between platforms and suppliers”, our research suggests that regulatory interventions are likely to reduce the incentive (and sometimes ability) of platforms to innovate. Particularly in a nascent and dynamic market such as this, regulatory interventions could reduce incentives for companies to develop new data management or business models, or to develop valuable commercial uses of data.

Given that innovation is both the driver of increasing consumer welfare and competition in many of these markets, a regulatory option could therefore be detrimental to consumers in the long term and HMG would not support such a regulatory option. However, HMG would cautiously consider removing some of the barriers that may be undermining the development of PIMS, such as more rigorously enforcing data protection or privacy regulations in order to increase consumer trust, so long as rigorous evidence was provided that such an intervention would have a positive effect.

European cloud initiative

Cloud computing has the potential to offer significant advantages to businesses and consumers and HMG would support some measures aimed at increasing trust and uptake in cloud computing. Specifically, reducing regulatory differences between Member States should both create more demand for cloud services across EU markets and also reduce the barriers to entry for providers. Suppliers should not need to adapt to the idiosyncrasies of 28 Member States in order to do business in the EU. Reducing fragmentation and deepening the Digital Single Market would aid this.

HMG would also strongly support the production of guidance on how best to commission cloud-based services. This should cover the necessity of starting with user needs, considering the market of available options, methods of evaluation and managing ongoing relationships with cloud providers. HMG has already provided a public sector example of this by producing cloud security guidance available online.[20]

Standards and certification schemes may in some instances be beneficial to building trust in cloud computing (e.g. for security), particularly if industry-led and voluntary. Identification and promotion of such schemes by government may help to give them more recognition; for example, in the UK, HMG promotes a cyber-security scheme. As part of the above mentioned cloud security principles, an implementation guide which refers to existing standards developed by the International Organisation for Standards[21] and the Cloud Security Alliance's 'Cloud Controls Matrix'.[22]

HMG would not support the introduction of mandatory certification schemes for cloud services. As discussed in the section on "relationships between platforms and suppliers" HMG research suggests that certification schemes can impose barriers to market entry and be detrimental to innovation, particularly in nascent and innovative markets. It is more effective to allow standards to emerge as markets mature, led by industry rather than government.

On this point, it is important to recognise that the digital economy is a global one which presents significant international trade opportunities for the EU, as the world's largest services exporter. Many platforms, including cloud providers, have a global reach, and how they develop will affect global digital trade. The international dimensions of these issues will need to be addressed in trade agreements, and as such the rules which are created in the DSM context will need to work within both the EU's internal and international frameworks. HMG would therefore advise caution on intervening in standards and certification which might have the effect of isolating EU

[20] https://www.gov.uk/service-manual/operations/cloud-security.html#cloud-security-principles
[21] http://www.iso.org/iso/home/standards/management-standards/iso27001.htm
[22] https://cloudsecurityalliance.org/group/cloud-controls-matrix//

companies from world markets, unless there is clear evidence that markets are not meeting user need.

Finally, greater use of cloud by public institutions across Member States would improve trust. Beneficial action in this area might include the much wider publication of case studies making clear the benefits of cloud-based solutions to both public sector users (increased efficiency, reduced costs, reduced risks, etc.) and private sector providers (investing in secure, reliable and high-quality cloud infrastructures). Shared case studies would demonstrate the added value from both perspectives.

Removing barriers to cloud uptake

As argued above, it is useful for government to build trust and encourage high standards in cloud computing by publicising guidance and examples of best practice. The HMG cloud framework, G-Cloud, can be used as a case study of what information cloud providers should offer. For each version of the G-Cloud framework a number of questions are asked of potential cloud service providers. These are required to be in line with 14 cloud security principles, covering issues including storage and security, identity and authentication, protection and administration. Full details are provided in annex G, a case study on the G-Cloud.

There is some suggestion that contractual practices can be a barrier to cloud uptake; this is discussed in annex G. However, the evidence also suggests that other barriers are much more significant. The Digital Single Market strategy evidence paper demonstrates that the main barrier to cloud adoption is lack of awareness: over a quarter of the population online is unaware of cloud services.[23] Amongst cloud-aware internet users, the main reasons cited for not using cloud services are security or privacy (44%); reliability of service providers (28%); and lack of skills (22%). HMG believes it would be more effective to address these barriers than to focus on contractual practices at this point.

However, the UK's Competitions and Markets Authority (CMA) launched an enquiry on 1 December 2015 into compliance with consumer law in the cloud storage sector, following some reports of consumer concerns about practices and terms being used that may breach consumer law. The CMA's review will assess how widespread these practices are, whether they breach consumer law and how they are affecting consumers, and will allow the UK to present further evidence in this context at a later date.

[23] http://ec.europa.eu/priorities/digital-single-market/docs/dsm-swd_en.pdf

The European Science Cloud (ESC)

An ESC has the potential to provide benefits to government, academics and consumers. Such a scheme might increase efficiency by reducing resource silos at research domain, technology platform, national and international levels. An ESC might also offer opportunities for more effective collaborations between academia, government and industry. As discussed in more detail above in the section on "access and re-use of scientific data", HMG recognises that open data policies can be valuable.

However, there are problems with the current proposals for the creation of an ESC. Any move to a single cloud solution would end up being highly multifaceted to be able to meet multiple requirements, in terms of the different forms and data involved and different Member State expectations of the project. Cloud solutions carry security risks and other constraints, and this project would need to be subject to a thorough and evidence-based cost/benefit analysis.

HMG would therefore be more in favour of consolidating existing resources than starting completely anew to create an ESC. HMG would also suggest that the science and policy communities do not currently have a clear and well-defined understanding of what a European Open Science Cloud would entail. HMG would welcome further details of the Commission's vision and how to achieve it.

Model Contracts

Model contracts can be a useful tool for a range of market participants, including consumers and small businesses attempting to enter the marketplace, and might be usefully used to build trust in cloud services. It is vital, however, that they are both voluntary and underpinned by clear legislation. If the underlying EU legislation is not harmonised then it would not be clear what legal regime would apply to the model contract, and the UK Government strongly disagrees with the position that a model contract in itself should be a 29th legal regime (as in the Commission's proposals for a Common European Sales Law, which we strongly opposed).

Model contracts for governments would need to meet certain extra requirements not applicable to business and consumer contracts, such as reflecting the regulatory obligations of EU public contracting bodies and any domestic policy obligations; ensuring fair and open competition and equal treatment of suppliers; and disclosure of contractual information. In other respects they would be similar to business and consumer contracts.

Consumers are often unaware of existing EU legislation that protects them when using cloud services and other digital products (where they have recourse to the court, or which law applies to their dispute, for example). It is therefore important that any use of model contracts should avoid falling into the same trap of a lack of consumer awareness.

Next Steps

HMG would encourage the Commission to produce clear, practical guidance for business and EU public contracting bodies, with illustrative case studies from both buyer and supplier perspectives where possible. This guidance should cover what to put in place contractually to ensure security of data, flexibility (commercially and technically), successful delivery and added value. Any guidance produced should ensure that it reflects the wide variety of circumstances under which businesses and consumers may contract cloud services: private and public clouds, different types of data, and different business models.

The Collaborative Economy

The development of the collaborative economy is impacting positively across the different forms of employment. It is improving allocative efficiency by opening up markets, unlocking dormant resources and increasing competition. PwC estimated in 2014 that the sharing economy would generate up to £230bn by 2025.[24] We need to ensure that the EU harnesses the full potential of the growth and employment that the sector may generate. Just as the collaborative economy unlocks the potential of previously under-used rooms, cars and capital, workers can also benefit from increased access, increased productivity, and greater allocative efficiency.

The collaborative economy provides workers with a wider range of employment options and enables engagement at greater distances. Barriers to entry are broken down and new ways of working are unlocked. This has a doubly beneficial effect: it allows businesses to expand, creating jobs; and it creates more flexibility for individuals to find working patterns which suit them. Online marketplaces, such as Upwork, provide greater flexibility for individuals and allow more people to join the labour market as they find employment that fits their personal circumstances.[25] Not everyone wants, or can commit to, a traditional permanent role and without this flexibility, these individuals can become marginalised from the labour market. This dynamic of greater opportunities for inclusion and participation can benefit many groups – Uber, for instance, adapted their app to support deaf drivers in September 2015.[26]

The internet has been the basis of this surge in the collaborative economy. Much of the emerging collaborative economy has been driven through the emergence of new digital platforms, which are changing the way employment functions. McKinsey estimated that the emergence of new digital platforms will add 2.5% to European employment numbers by 2025, with some countries such as Spain seeing twice that growth – though this could be partly the result of making work previously done in the informal "grey economy" visible by pulling it onto online marketplaces. The overall effect is greater participation in the workforce, a factor that could lift the GDP of the UK and Germany by nearly two percentage points over the next decades.[27]

The collaborative economy also faces challenges as an engine for employment. There is increasing demand for digital and high tech skills, and as the internet

[24] http://pwc.blogs.com/press_room/2014/08/five-key-sharing-economy-sectors-could-generate-9-billion-of-uk-revenues-by-2025.html
[25] New world of work: digital marketplace reshapes casual labour, Financial Times, Andrew Byrne and Richard Waters, 5th August 2015
[26] https://newsroom.uber.com/austin/2015/09/exciting-app-features-for-deaf-and-hard-of-hearing-partners/
[27] A Labor Market that works: Connecting talent with opportunity in the Digital age, McKinsey Global Institute, June 2015

underlies the collaborative economy, the collaborative economy likely shares this demand. The current lack of digital skills needs to be addressed. In 2011, there were around 22 million EU workers employed in high-tech industries and services, up 20% from 2000, representing 10% of the EU workforce.[28] Of the high-tech industries, ICT professionals registered the strongest growth at 4.3% per year over the period 2000-2012, more than seven times higher than the total employment growth over this period. Whilst demand for digitally competent professionals continues to grow,[29] supply is failing to keep pace, with almost 40% of enterprises trying to recruit ICT professionals experiencing difficulties.[30]

Beyond skills issues, there are potential market fairness issues when traditional operators face a 'regulatory gap' with dynamic new entrants. This means that we should look carefully at the regulation of traditional operators to ensure that it is flexible, not burdensome, and minimises barriers to entry.

Although the collaborative economy shows great potential to create jobs and innovative new business models, it currently faces obstacles to development and scaling up across borders in the EU. These obstacles include:

- Protectionist and disproportionate local and national restrictions on the collaborative economy.
- Regulations designed for a pre-internet age, which unnecessarily restrict collaborative economy businesses and lead to legal uncertainty.
- Difficulties for online businesses to start up and operate across the EU, such as complicated and lengthy procedures to register a company, difficulties finding out the requirements in a particular Member State, restrictions on registering a domain name in each Member State, and registering to pay VAT.
- Regulatory and administrative burdens acting as barriers to innovation and barriers to scaling up.

There are some situations in which action at EU level would have a beneficial effect on the development of the collaborative economy. These include:

- Guidance and enforcement of existing EU legislation, discussed below.
- Points of Single Contacts (PSCs) and the Single Digital Gateway, discussed below.

[28] High-Technology Employment in the European union, European Federation of Engineering Consultancy Associations, December 2013
[29] 'E-skills mismatch: evidence from PIAAC', Pellizzari M. et al., JRC-IPTS Digital Economy Working Paper, forthcoming 2015
[30] Eurostat, ICT survey of Enterprises, European Commission, 2014

- Examination of EU legislation to ensure regulation is fit for a digital age and that barriers to innovation, start-up and scale-up are removed.

More guidance and better information on the application of the existing rules is required, rather than further regulation. HMG strongly welcomes the commitment to issue guidance to clarify the application of existing EU law to the collaborative economy. We call on the Commission to take enforcement action on the basis of that guidance to prevent disproportionate, unjustified restrictions. If the work on guidance or the responses to this consultation highlight regulatory gaps or concerns, any resulting action should be evidence-based and follow better regulation principles. This is particularly important given that this is a still-emerging area which is changing and developing quickly, and premature regulation may not have the effect intended, working instead to reduce competition and increasing barriers to entry, as well as harming the incentive to innovate.

Clear information and complete procedures should also be made available online for traders and collaborative economy platforms through the Member States' PSCs, as provided for in the Services Directive. The Commission's Single Digital Gateway initiative should aid collaborative economy businesses to start up and scale up, and should be combined with efforts to improve national provision for businesses.

Challenges to the development of the collaborative economy

Domestically in the UK, there have been a number of challenges to the growth of the collaborative economy from a regulatory perspective. Examples include local councils challenging the terms on which people are able to rent out their properties; questions raised by representatives of the hotel industry around compliance of AirBnB users with health and safety regulations; and questions around how we can use public data to support 'trust' elements of the collaborative economy by providing more efficient verification methods for individuals. Tax compliance also presents a significant challenge, as many users of the collaborative economy will not be aware of their obligations.

The UK has introduced a number of support measures and changes to regulation in order to support the growth of the collaborative economy. For example, we have taken action on home sharing to ensure that individuals participating in the collaborative economy are treated proportionately: we have reformed legislation on short-term letting to allow residents in London to rent out their property for up to 90 nights a year, without the need for planning permission. We have connected car sharing companies with the driver and vehicle licensing agency to ensure that their requirements are fed into the design of new digital systems, allowing companies to provide a better and more secure service as they can access driver data (with the

permission of the driver). We have also supported the creation of a sharing / collaborative economy representative group, SEUK.[31]

Self-regulation and voluntary standards

To ask whether self-regulation is 'sufficient' is not the most appropriate way to frame this question. Clearly there is a great deal of regulation, European and national, which rightly applies to particular elements of the collaborative economy, so self-regulation cannot be considered in isolation.

It is important to strive to minimise disproportionate burdens on business when considering regulatory action at either EU or domestic level. In that vein, industry-led alternatives to regulation – including self-regulation, standards and kitemarks – should be considered where possible, and we welcomed the Commission's better regulation Communication in May this year supporting this.

The UK's sharing economy industry body, SEUK, is currently developing research around a trustmark, which has the potential to raise assurance in the collaborative economy for providers and customers.

Social Protection in different business models

Eligibility for employment protections in the UK is based on an individual's employment status. This is based on the reality of the relationship and not necessarily the name of the contract or any specific terms (for instance, guaranteed hours). As such, individuals engaged through the collaborative economy will qualify for the most appropriate employment status. Where individuals meet the test to be considered 'employees' or 'workers' they will be eligible for all associated protections regardless of how the relationship was originally developed, for instance online.

The UK looks carefully at what is appropriate for individual activities in the collaborative economy. We strongly recognise the need to treat collaborative economy providers proportionately.

As there is no requirement to register a business in the UK, we have no need to distinguish between a sole trader undertaking commercial activity and the occasional intervention of a private individual. Ultimately, an individual's employment status will be determined by an employment tribunal based on the reality of the relationship. Whether an individual calls themselves a sole trader, self-employed or considers themselves to be truly casual, if the individual meets the test for a 'worker' or 'employee', the associated protections will apply.

With respect to homesharing, we have taken action to ensure the distinction is made at an appropriate level and individuals participating in the collaborative economy are

[31] http://www.sharingeconomyuk.com/

treated proportionately. For example, we have reformed legislation on short-term letting to allow residents in London to rent out their property for up to 90 nights a year, without the need for planning permission.

With respect to UK legal protections, with the exception of general contract law – which provides some checks and balances in bargains between two parties in consumer to consumer (C2C) transactions – the rationale underpinning consumer legislation is to redress the balance in bargaining power between a consumer and a trader. General consumer law in the UK therefore applies to contracts between a trader and a consumer (B2C) but not business to business (B2B) nor consumer to consumer (C2C), as in theory both parties in such transactions have equal status and should therefore have the freedom to contract as they wish.

However, the distinction between an individual selling as a consumer and an individual selling as a trader is becoming increasingly blurred. The UK Government therefore clarified in the Consumer Rights Act (2015) that a trader means “a person acting for purposes relating to that person’s trade, business, craft or profession….” and a consumer means “an individual acting for purposes that are wholly or mainly outside of that individual’s trade, business, craft or profession.” So if the seller in a “C2C” transaction was in fact a trader whose main income was their activity on the C2C platform, the B2C rules would apply. If the seller was simply an individual selling something or offering a service as a side-line, then consumer law would not apply.

There are however some sector-specific exceptions in response to particular issues, such as in the secondary ticketing market, where regulations apply to C2C transactions as well as B2C transactions.

We do not currently have any plans to extend the application of horizontal consumer law to C2C transactions in general. The UK Competitions and Markets Authority are keeping the issue under review but have not currently identified any evidence of a need to intervene.

Taxation

The UK government is committed to making it easier for people participating in the collaborative economy to understand their tax obligations, including by producing targeted guidance for them. More broadly, the Government is transforming tax administration over the next 5 years, replacing tax returns with digital tax accounts, which will help millions of individuals and small businesses engage with and understand their tax affairs.

This publication available from www.gov.uk/bis

Contacts us if you have any enquiries about this publication, including requests for alternative formats, at:

Department for Business, Innovation and Skills
1 Victoria Street
London SW1H 0ET
Tel: 020 7215 5000

Email: enquiries@bis.gsi.gov.uk

BIS/16/74