Summary of *Review of the Open Internet Codes*

Executive summary

The UK has been following a self-regulatory approach to the Open Internet and traffic management since 2011. With the Code of Practice on the Open Internet and the closely associated Code on Traffic Management Transparency (together referred to here as the Codes), the Broadband Stakeholder Group (BSG) has gathered the major Internet Service Providers (ISPs) and mobile virtual network operators (MVNOs)as signatories to the Codes. Taken together, they represent over 90% of UK subscribers on both fixed and mobile contracts. The adjacent Open Internet Forum (OIF) offers an informal platform for exchange on issues among all interested stakeholders.

In light of the Connected Continent Regulation (10788/15) on the Open Internet, it is an opportune moment to review the UK Codes of Practice and in particular explore their effectiveness and compliance with the Connected Continent Regulation with the aim to develop the Codes further.

Effectiveness of the Codes

Our research showed that there is no single measure for the Codes' effectiveness as they aim to establish three general principles revolving around the Open Internet.

The first principle is the *prevalence of full internet access products* that allow end-users to access all legal content and services on the internet. Our review of ISPs' Internet Access Service (IAS) products found an obvious prevalence of full IAS products in the UK. In fact, almost all UK internet users have virtually full access to the internet. However, some ISPs block unsolicited services like spam to improve consumers' quality of experience. No signatory to the Codes continuously slows down any traffic on their network. Prioritisation of services and content is equally rare.

The second principle defines the *absence of negative discrimination of content and services*, especially when provided by third parties. Since the Codes were established, there have been no official complaints about negative discrimination of an Over-The-Top (OTT) service. Our review of IAS products indicated that almost no IAS product blocks or slows down specific content or services during peak times, which would indicate negative discrimination. This is a substantial change from the situation before the Codes were established, when negative discrimination had been broadly discussed in the media as a major issue that UK consumers face. Reasonable traffic management, for instance, to mitigate congestion is applied by UK ISPs.

Third, *transparency and competition* are established by the Key Fact Indicators (KFIs) defined in the self-regulation on traffic management. KFIs are an effective way to make traffic management measures transparent for consumers. Complemented by the fierce competition

in the UK, any ISP that does not commit to the Codes may in turn be susceptible to consumer switching. This, alongside high levels of innovation by providers of British OTT services like BBC iPlayer, All4 and ITV Player, has helped support a market environment where OTT services can thrive. In fact, UK consumers have the broadest choice of music and video streaming services across OECD countries, and OTT services providing services functionally similar to typical electronic communication products thrive in the UK. OTT services, enabled by an Open Internet, appear in turn to have driven demand for broadband connectivity and upgrades.[1]

Ofcom's evaluation of the effectiveness of the Codes concurs with our findings.

Compliance with the Connected Continent Regulation

The in-depth compliance analysis conducted in the context of this study revealed that the vast majority of concepts and principles of the Codes comply with the Regulation. This finding is reflected by the signatories who believe a positive aspect of the upcoming Regulation is that they adopt some of the underlying principles of the Codes.

There are only two issues where the Regulation implies additional duties or prerequisites for ISPs: 1) *the general principle that legal content, applications and services or categories thereof should not be blocked,* and 2) *the right to develop and offer managed services*. In these cases, the Codes can easily be altered to address the gaps that exist as compared to the Regulation's requirements.

On the other hand, the Codes also add value over and above the requirements laid out in the Regulation. ISPs' voluntary commitment to *make full IAS the norm in the UK* market is one of the Codes' cornerstones, but it is not reflected in the Regulation in the same way. With social norms and conduct of peers instead of a prescriptive set of rules being at the heart of the self-regulatory approach, one may expect this commitment to be more effective than governmental regulation which is often perceived as arbitrary by businesses. Equally, *transparency about traffic management for consumers* is dealt with more effectively by the Codes as compared to the Regulation, which requires such information to be described in the terms and conditions. The KFIs, however, bring the most important information upfront and make it comparable for consumers. In principle, this should facilitate switching and in turn increase competition in the UK. Finally, the Codes also cover *alternative products (other than IAS)* proactively whereas the Regulation remains unclear.

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[1] 40% of audiences say that BBC iPlayer was "one of the reasons I like having broadband at home", and 13% said it was "one of the reasons I got broadband at home in the first place". The first percentage is based on a 2015 average of data from Pulse by GfK for the BBC; the second percentage is from Pulse by GfK for the BBC, based on 777 UK adults who used iPlayer on a computer in the last three months (October 2013: six years after the launch of iPlayer in 2007). See also, for example, WIK (2015): Competition and investment: An analysis of the drivers for superfast broadband. The WIK study found that "In general, regulatory factors appear to date to have had less influence over NGA coverage and take-up than market-based factors such as infrastructure competition or online video".

The way forward for the Codes

In sum, this review found the Codes to be compliant with the Regulation. There is some potential to update the Codes, in light of current and expected market developments. These include the Internet of Things (IoT), demand for innovative plans for consumers, and the potential for diverging incentives between ISPs and Content and Application Providers (CAPs)[2] as well as novel modes of new cooperation.

First and foremost, as the Regulation addresses both the Open Internet and measures to ensure transparency about traffic management for consumers, it seems appropriate to merge the two Codes into one. Identical signatories to the Codes make this straightforward.

Second, the Codes should offer UK-specific guidance to signatories, alongside the Body of European Regulators for Electronic Communications' (BEREC) guidelines, where the Regulation fails to do so. Thus, the Codes could specify a set of agreed principles and voluntary commitments as regards the offering of managed services and alternative services relevant for IoT roll-out, for example. Furthermore, the Codes could specify a set of agreed principles and voluntary commitments as regards reasonable traffic management practices.

Third, with the KFIs, the Codes have already outperformed the Regulation as regards consumer information and increased transparency for all stakeholders. We recommend building on this strength of the existing Code and developing the KFIs further in light of the results of Ofcom's and BEREC's extensive consumer research into this issue.

Finally, it is sensible to maintain the parts of the Codes referring to Ofcom's monitoring commitments as well as the voluntary process for raising concerns as they will remain relevant for signatories. Over and above the official complaint process, it should be noted that the continuous exchange in the OIF has helped significantly to achieve mutual understanding of good conduct and establish an atmosphere of trust between ISPs and CAPs. This will continue to be an important forum to discuss some of the emerging risks and opportunities in relation to the Open Internet which fall outside the Regulation.

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[2] As mass market IPTV becomes closer to becoming mainstream, Ofcom have noted that "the relationship between the ISPs as distribution platforms and broadcasters as content providers has not yet been tested. For example, there could be a concern that the ISPs could act as new gatekeepers over the distribution of broadcast services over IP. Especially if content providers have to rely on their managed services to provide a quality TV experience." Cf. Ofcom (2014): The future of free to view TV. A discussion document, Figure 5.3.

Table 0-1:   Compliance assessment and proposals to adapt the Codes

Concept or principle	Compliance assessment (see Section Error! Reference source not found.)			Proposals to adapt the Codes
	Codes go further than Regulation	Regulation goes further than Codes	Concept not covered in Regulation	
Concept of the Open Internet	**Compliant** (With minor updates)			Update the concept to reach compliance
	–	–	–	
General principle that legal content, applications and services, or categories thereof should not be blocked	**Compliant**			Address the gaps in the Codes
	–	✔ (Regulation implies additional duties for providers)	–	
Products that offer full internet access are the norm	**Compliant**			– (Maintain unaltered as the Code adds value to the Regulation)
	✔ (Providers' self-commitment absent in Regulation)	–	–	
Ability to offer alternative types of products	**Compliant** (Assuming that alternative products are outside of Regulation's scope/application)			Develop a clear understanding of these products
	–	–	✔	
Right to develop and offer managed services	**Compliant** (A few detailed aspects need further inspection)			Address the gaps in the Codes; develop principles and voluntary commitments as regards these services
	–	✔ (Regulation imposes additional prerequisites)	–	
Concept of reasonable traffic management and preventing negative discrimination	**Partially compliant** (Some traffic management practices listed in the Codes risk being in conflict with the Regulation)			Develop a set of compliant traffic management good practices
	–	–	–	
Commitment 3 of the Open Internet Code and the commitments of the Traffic Management Transparency Code	**Compliant**			– (Maintain unaltered as the Code adds value to the Regulation)
	✔ (KFIs are superior to contractual information in effectively informing consumers)	–	–	

Monitoring the commitments of the Open Internet Code of Practice	Compliant			– (Maintain unaltered)
	–	–	–	
Voluntary process for raising concerns	Compliant			– (Maintain unaltered as the Code's process complements the Regulation)
	–	–	–	

Recommendation 1: Merging of the two Codes

Given that the Regulation addresses both the concept of the Open Internet as well as the requirements for transparency of traffic management measures to consumers, it is sensible to reflect this move in a single merged Code of Practice. One may expect very little if any friction in doing so as the signatories for both Codes of Practice are identical.

Recommendation 2: Provide consistent guidance on how to interpret the Regulation

Our analysis of the Regulation clearly shows that numerous issues still require clarification. Many concepts in the Regulation are vague, inconsistent or omitted completely. The BEREC guidelines are expected to shed some more light on these issues, but they will in particular focus on NRAs' duties and scope of action. The Codes could serve an important function here, namely to provide a consistent interpretation of the Regulation that builds on the insights and requirements of the industry itself.

Within that, the process of drawing up a common Code of Practice that provides such a consistent interpretation of the Regulation may – similar to the first development of the Codes among stakeholders – facilitate a common understanding of the Regulation. In turn, this may mitigate complaints and conflicts down the road. Naturally, such a process has to take the BEREC guidelines into account. In line with the empirical insights on the general characteristics of self-regulatory approaches, one may expect that such a process enables a mutual understanding among relevant stakeholders based on social norms and peer conduct that has thus far been highly effective in various ways.

Recommendation 3: Proactively address services other than IAS (e.g. managed services)

As the compliance analysis in this report has identified, there are areas that the Regulation does not touch upon. Within that, services other than IAS appear to be particularly relevant especially in light of the market developments outlined in the previous section.

Against this backdrop, it seems relevant that an updated version of the Codes should specify a set of agreed principles and voluntary commitments as regards the offering of managed

services, reasonable traffic management practices and services other than (full) IAS. The roll-out of IoT technology underscores the relevance of this point, as the previous section highlighted.

Recommendation 4: Review KFIs with a view to meet latest consumer information best practices

As shown in the above, the KFIs established through the Codes in the UK have already proven to be effective. They provide consumers with consistent, standardised information about traffic management measures. As such, the commitments set up by the Codes outperform the requirements of the Regulation that only refer to presenting technical information in the terms and conditions of IAS products.

The KFIs are substantially more likely to reach consumers' attention than any consumer information included in terms and conditions: As our recent report for Ofcom[3] clearly shows, most consumers do not read, do not understand and do not act upon online terms and conditions. The KFIs on the other hand are focused and consistent, which makes them relatively easy to compare for consumers. Technical and legal jargon has been reduced as compared to typical contractual agreements, and the information is made available upfront to consumers by most ISPs.

Nonetheless, recent research conducted by us on behalf of BEREC[4] indicates that consumers' understanding of information traffic management can be significantly improved by providing them with easy-to-comprehend, vivid and figurative information, for example in the form of an animated video. Our experiment has shown that such a video, when representing both positive and negative effects of traffic management, can educate consumers without immediately biasing their opinions in one way or another. In light of continuous advances in consumer information, we recommend to periodically review the KFIs in order to ensure that they continue to adhere to the relevant best practices.

Recommendation 5: Maintain Ofcom's position and the complaint process

In the primary research conducted as part of this review with individual stakeholders, it became clear that both the role that the Codes envision for Ofcom as well as the voluntary process for raising concerns will remain relevant for signatories and should be sustained.

THE FULL REPORT IS AVAILABLE AT www.broadbanduk.org

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[3] Arnold, R.; Hillebrand, A. & Waldburger, M. (2015): Personal data and privacy. A report for Ofcom. http://stakeholders.ofcom.org.uk/internet/personal-data-and-privacy/.

[4] Arnold, R.; Waldburger, M.; Morasch, B.; Schmid, F.; Schneider; A.; Cilli, V.; van der Peijl, S. & Wauters, P. (2015): The value of network neutrality to European consumers. A study commissioned by BEREC. http://berec.europa.eu/eng/document_register/subject_matter/berec/download/2/5024-berec-report-on-how-consumers-value-net-_2.pdf