

## EU NET NEUTRALITY POLICY AND THE MOBILE SECTOR: THE NEED FOR COMPETITION LAW STANDARDS

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### Abstract

The much-awaited EU Net Neutrality rules contained in the *TSM Regulation* entered into force on 30 April 2016. These rules have the overarching aim of safeguarding the open Internet and, in doing so, seek to strike a balance between the interests of consumers and Internet Service Providers (“ISPs”). However, the natural consequence of seeking such a compromise is legislative uncertainty. Given the fact that the various Articles of the *TSM Regulation* offer very little by way of unambiguous guidance, there is a serious risk that many broadly formulated provisions of that Regulation are amenable to a restrictive interpretation, resulting in the over-regulation of ISPs. If that scenario were to materialise, the author believes that there would be a risk of consumer welfare benefits being unwittingly sacrificed on the otherwise laudable altar of the open Internet. Given the breadth of the language used in the *TSM Regulation*, the risk of over-enforcement is tangible, especially given the constantly evolving Internet value chain, the multi-sided nature of Internet-related markets and the disruptive nature of new Internet business models.

Although BEREC (the body representing EU telecommunications sector regulators at national level) has been assigned the unenviable task of providing, by August 2016, the guidance required to give effect to the broad principles of the *TSM Regulation*, it is the author’s contention that BEREC’s work need not be under “scorched earth” conditions, but should be driven by the standards developed over the years under EU competition rules, insofar as: (i) their application in a regulatory setting should inform regulators of how the concept of non-discrimination is to be interpreted; and (ii) the development of ‘objective standards’ under EU competition rules is the best means of prescribing: (a) the types of “commercial practices” which have a material impact on consumer choice; and (b) the legitimate scope of necessary traffic management techniques.

In applying such competition law standards, it is contended that regulators applying the Net Neutrality rules within the *TSM Regulation* should attach due weight to *four* key principles of interpretation:

1. The importance of relying on key Recitals in the in the *TSM Regulation* to provide clear guidance, both insofar as these Recitals establish *ex post* standards of analysis (under Articles 101 and 102 TFEU) with which to assess the effects of certain “agreements” and “commercial practices” (*i.e.*, zero-rating and specialised services), as well as the application of the non-discrimination obligation.
2. An understanding of the range of technical and regulatory constraints faced by mobile operators which have a material impact on the management of traffic over their networks, and hence on the ‘objective justification’ of their actions.
3. A more balanced economic view of the efficiencies flowing from certain commercial practices and a broader view of the welfare benefits that flow from differential treatment, consistent the approaches that have developed under competition policy in relation to a range of different industrial sectors.
4. An understanding that the perceived market failures flowing from the breach of Net Neutrality principles can be best addressed by the application of competition law principles, which are well adapted to deal with such concerns, irrespective of whether the institutions ultimately responsible for the implementation and interpretation of the *TSM Regulation* might be National Regulatory Authorities.

Those who advocate that the Net Neutrality non-discrimination principle constitutes a blanket rule which must be applied without discretion, are in effect ignoring the consumer welfare considerations which would be better served by the inherent flexibility of EU competition rules, especially in terms of their ability to balance consumer welfare and efficiency benefits against losses to competition. ‘Smart’ Net Neutrality regulation should enable competent authorities to ensure a customer’s freedom to choose the services they desire, while at the same time addressing the fast-moving and competitive dynamics of the Internet ecosystem.

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## I. Introduction

While there is no precise definition of Net Neutrality, it is commonly understood to be the policy that ensures the objective of an open Internet, with no blocking or throttling of online content, applications and services (*i.e.*, equal treatment of all data flows).<sup>2</sup> When the policy debate on Net Neutrality first emerged in Europe in 2007,<sup>3</sup> its critics felt that a specific legal regime for non-discriminatory access to the Internet was unnecessary in light of the combined effect of a robust European regulatory framework and a pro-active competition law enforcement policy, which combined to ensure European citizens and undertakings with the appropriate levels of Internet access. These critics dubbed the policy debate as little more than a “solution searching for a problem”. By contrast, supporters of the policy expressed the view that strong, specific regulation was necessary to ensure such a right and that its scope should at the very least match the standards that were available in the United States.<sup>4</sup>

After a number of false starts,<sup>5</sup> a compromise was reached with the adoption by the European Parliament and the Council of the *TSM Regulation*,<sup>6</sup> which entered into force on 30 April 2016. That legal instrument is divided very distinctively between general, normative rules for the application of Net Neutrality policy, on the one hand, and specific retail pricing implementation provisions for a revised roaming regime, on the other.

It will be argued in this paper that the particular treatment of Net Neutrality rules in the *TSM Regulation* generates certain logical consequences in terms of the interpretation and application of those rules. This has led the author to conclude that the only appropriate way in

<sup>2</sup> Refer to the BEREC (the Body of European Regulators for Electronic Communications (“BEREC”)) was established by Regulation (EC) No 1211/2009 of the European Parliament and of the Council of 25 November 2009, as part of the Telecom Reform package ([http://berec.europa.eu/eng/about\\_berec/what\\_is\\_berec/](http://berec.europa.eu/eng/about_berec/what_is_berec/)) Report “Monitoring quality of Internet access services in the context of net neutrality” 25 September 2014 (“BoR (14) 117”). Accordingly, Article 8(4)(g) of Directive 2002/21/EC (the *Framework Directive*), provides that National Regulatory Authorities should promote the interests of the open Internet by, *inter alia*, “promoting the ability of end-users to access and distribute information or run applications and services of their choice”. Other elements of Net Neutrality are included in other legal instruments of the EU Regulatory Framework, namely: Transparency (*cf.* [Art. 20](#) and [21](#) of the *Universal Service Directive*); Quality of Service (*cf.* [Art. 22\(3\)](#) of the *Universal Service Directive*); and E-privacy (*cf.* [Art. 5](#) of the *ePrivacy Directive*).

<sup>3</sup> For an overview of the pros and cons of the various supporters and critics of Net Neutrality policy, refer to the discussion in K. Maniadaki, “EU Competition Law, Regulation and the Internet: The Case of Net Neutrality”, Wolters Kluwer, Netherlands, 2015, at pp. 35-56. Refer also to, C. T. Marsden, “Network Neutrality: History, Regulation and Future”, IDP (Number 13), February 2012, I-ISSN 1699-8154. A number of the policy considerations at issue in the *TSM Regulation* are also discussed in P. Alexiadis and C. Cockroft, “Net neutrality in Europe: reconciling the irreconcilable”, *Financier Worldwide*, June 2014.

<sup>4</sup> This was not a straightforward exercise, especially given the very different regulatory and political environment of the United States and the success of legal challenges to the powers of the FCC to regulate Net Neutrality. See the Wall Street Journal article, “FCC’s Net Neutrality Rules Expected to Unleash Court Challenges”, 25 February 2015.

<sup>5</sup> Refer to the Commission Press Release, “Commission proposes major step forward for telecoms single market”, 11 September 2013; *cf.* European Parliament Press Release, “Ensure open access for internet service suppliers and ban roaming fees, say MEPs”, 3 April 2014; *cf.* European Council Press Release “Roaming and open internet: Council ready for talks with EP”, 4 March 2015.

<sup>6</sup> Regulation (EU) 2015/2120 of the European Parliament and of the Council of 25 November 2015 laying down measures concerning open internet access and amending Directive 2002/22/EC on universal service and users’ rights relating to electronic communications networks and services and Regulation (EU) No 531/2012 on roaming on public mobile communications networks within the Union (“*TSM Regulation*”), OJ L 310, 26.11.2015, pp. 1–18.

which to interpret and apply the Net Neutrality rules in the *TSM Regulation* is to utilise competition law standards that apply *inter alia* the concept of non-discrimination. This is the only analytical tool equipped to put into effect a policy whose scope must cover a wide range of potential business practices. The consequence of adopting such an approach will be to lower significantly the level of risk associated with over-regulation (or the making of a so-called “Type I” error, in antitrust parlance), with respect to which the implementation of Net Neutrality policy is particularly prone.<sup>7</sup> In the absence of a competition law-style approach being adopted, nowhere is the likelihood of over-regulation error occurring through the implementation of a rigid, doctrinaire Net Neutrality policy more self-evident than with respect to the mobile sector.

While some might feel that the application of competition logic in a regulatory instrument constitutes a veritable “leap of faith”, the author feels that the symbiotic relationship within the EU between *ex ante* and *ex post* disciplines in the electronic communications sector<sup>8</sup> lends itself to such an approach at this point in time in the maturity of EU law. The broad language of the *TSM Regulation*, given the policy mischiefs that it seeks to address, and the commercial and technological realities which characterise the mobile sector, all support such a view. However, insofar as it is National Regulatory Authorities (“NRAs”) that are responsible for implementing such a regime, a learning curve needs to be climbed.<sup>9</sup>

## II. Key Elements of the *TSM Regulation*

Article 1(1) of the *TSM Regulation* pronounces that it “*establishes common rules to safeguard equal and non-discriminatory treatment of traffic in the provision of internet access services and related end-users’ rights*” (emphasis added). More specifically, Article 3(1) provides that:

*“End-users shall have the right to access and distribute information and content, use and provide applications and services, and use terminal equipment of their choice, irrespective of the end-user’s or provider’s location or the location, origin or destination of the information, content, application or service, via their internet access service.”* Beyond this broad mandate, there are a number of key elements of those rules which remain undefined, and whose meaning and scope need to be understood in their particular legislative context.

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<sup>7</sup> Thus, Community law should avoid both under- and over-enforcement. Over-enforcement is defined as prohibiting agreements, conduct, or mergers where there is no actual or potential harm to the relevant market (‘Type I’ errors, or ‘false positives’). Under-enforcement is defined as failing to prohibit anti-competitive harm within the marketplace (‘Type II’ errors, or ‘false negatives’). Over-enforcement may even be more harmful than under-enforcement where it would have a tendency to prevent commercial practices that are not *per se* anti-competitive taking place if such action would have a negative impact on innovation in the marketplace.

<sup>8</sup> That relationship is described in P. Alexiadis, “Balancing the Application of Ex Post and Ex Ante Disciplines under Community Law in Electronic Communications Markets: Square Pegs in Round Holes?”, *Rights and Remedies in a Liberalised and Competitive Internal Market* (University of Malta), Gutenberg Press, March 2012.

<sup>9</sup> Refer to B. V. Schewich, “Network Neutrality and Quality of Service: What a Non-Discrimination Rule Should Look Like”, The Centre for Internet and Society, 11 June 2012, which provides that Net Neutrality rules are based on “*very general trade-offs among competing values*”, thus creating the need to implement a delicate balancing act.

## 1. Elements of Discriminatory Treatment

Despite the general prohibition on non-discrimination, operators and end users remain free to conclude commercial agreements (*i.e.*, on prices) on the features of Internet access services to be delivered (Article 3(2)).<sup>10</sup> One example of such commercial agreements includes the practice of “zero-rating” (a form of differential pricing),<sup>11</sup> which involves the provision of free services that are not charged or included in the end user’s data cap limit; such services are not expressly prohibited under the *TSM Regulation*, unless the practice of zero-rating might otherwise be considered to have a material impact on consumer choice. Another example may be the bundling of content and data (*e.g.*, to provide a music service).<sup>12</sup> Nevertheless, these agreements must not fall foul of the general principle set forth in Article 3(3) that Internet Service Providers (“ISPs”) are obliged to “*treat all traffic equally, when providing internet access services, without discrimination, restriction or interference, and irrespective of the sender and receiver, the content accessed or distributed, the applications or services used or provided, or the terminal equipment used.*” When providing Internet access services, ISPs are permitted to implement “*reasonable traffic management*” techniques that are based on objectively different technical Quality of Service (“QoS”) requirements, but which are not based on commercial considerations (*i.e.*, price).

Article 3(5) *TSM Regulation* allows an ISP or operator which provides optimised services (“specialised services”), content, or applications to charge customers different prices for objectively different forms of optimised services (*i.e.*, those services of high quality which are provided at a higher price than general Internet services).

Where “specialised services” (as opposed to “general Internet services”) are provided which require different levels of quality, volume and performance from the delivering network, “[o]perators [can] apply differentiated pricing for such offerings while the user [can] select the contract most appropriate for his/her needs”.<sup>13</sup> However, various safeguards have been put in place to ensure that operators do not circumvent the non-discrimination principle through the use of the “specialised services” exemption through commercial agreements, with the responsibility of policing such agreements being the responsibility of NRAs.<sup>14</sup>

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<sup>10</sup> Article 2(2) of the *TSM Regulation* defines “Internet access services” as: “*a publicly available electronic communications service that provides access to the internet, and thereby connectivity to virtually all end points of the internet, irrespective of the network technology and terminal equipment used*”. In addition, it should be noted that the provision of specific and customised Internet offers/services to business customers, which are not publicly available, are not defined within the Regulation.

<sup>11</sup> Refer to J. A. Eisenach, “The Economics of Zero Rating”, NERA Economics Consulting, March 2015, at p.6.

<sup>12</sup> Refer to the BEREC “Report on OTT services”, of October 2015 (“BoR (15) 142”). In the Report, BEREC has expressed that “*general price differentiation (e.g. between the data usage of a zero-rated service and other services) could be an incentive, although the level of price differentiation is limited by the fact that the pricing structure needs to stay sufficiently simple for consumers to understand*”.

<sup>13</sup> Refer to BEREC Report, “Differentiation practices and related competition issues in the scope of net neutrality”, 26 November 2012 (“BoR (12) 132”).

<sup>14</sup> Article 3(2) of the *TSM Regulation* provides that: “*Agreements between providers of internet access services and end-users on commercial and technical conditions and the characteristics of internet access services such as price, data volumes or speed, and any commercial practices conducted by providers of internet access services, shall not limit the exercise of the rights of end-users laid down in paragraph 1*”. See also Article 5 of the *TSM Regulation*, which deals with the NRAs’ responsibilities regarding supervision and enforcement.

## 2. The Nature of “Specialised Services”

According to Recital 16 of the *TSM Regulation*, “specialised services” are those services “*which are optimised for specific content, applications or services, or a combination thereof, where the optimisation is necessary in order to meet the requirements of the content, applications or services for a specific level of quality*”.<sup>15</sup> While it was initially hoped that a specific definition could be included for such a concept in the *TSM Regulation*, it was concluded that there were wide discrepancies between different national situations, “*varying from none to all operators offering specialised services in parallel to offering Internet best-effort access service*”.<sup>16</sup> Across the Member States, the most common applications which are considered to fall within the “specialised services” category include VoIP, IPTV, VoD, and health services.

According to the Commission, the *TSM Regulation* “*intends to strike a balance between safeguarding the general quality of internet access for all users ('best effort') and enabling innovative services, such as telemedicine services to flourish*”. Therefore, specialised services can be considered to be innovative services that are significantly different to general Internet services. In order to ensure that operators do not circumvent the non-discrimination principle when providing specialised services in parallel to general Internet services (*i.e.*, within the same capacity stream), Article 3(5)<sup>17</sup> requires that ISPs must manage effectively their capacity so as to be able to accommodate both sets of services, while the optimisation of traffic supporting specialised services across the network “*must be objectively necessary to meet service requirements for specific levels of quality that are not assured by the Internet access service*”.<sup>18</sup> Determining what is “objectively necessary” is a matter that is left to be determined by the NRAs.

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<sup>15</sup> Refer also to BEREC Report, “A view of traffic management and other practices resulting in restrictions to the open Internet in Europe: Findings from BEREC’s and the European Commission’s joint investigation”, 29 May 2012 (“BoR (12) 30”), where “specialised services” are defined as those services which “*differ from (public and best effort) Internet access service [i.e., are not substitutable] in that they provide a generally guaranteed quality of service*”. “Best effort” has been the traditional standard for the treatment of data in a neutral way and as efficiently as possible.

<sup>16</sup> Refer to BoR (12) 30 at p. 11.

<sup>17</sup> Article 3(5) of the *TSM Regulation* provides that: “*Providers of electronic communications to the public, including providers of internet access services, and providers of content, applications and services shall be free to offer services other than internet access services which are optimised for specific content, applications or services, or a combination thereof, where the optimisation is necessary in order to meet requirements of the content, applications or services for a specific level of quality. Providers of electronic communications to the public, including providers of internet access services, may offer or facilitate such services only if the network capacity is sufficient to provide them in addition to any internet access services provided. Such services shall not be usable or offered as a replacement for internet access services, and shall not be to the detriment of the availability or general quality of internet access services for end-users*”. In addition, the use of the word ‘*detriment*’ (in Recital 17) in this context should be interpreted as referring to the situation where the overall impact in the provision of optimised services affects the QoS of the general Internet access services (*i.e.*, taking into account *all* services provided by the ISP) over a reasonable period of time. See R. O’Donoghue and T. Pasco, “Net Neutrality in the EU: Unresolved Issues Under the New Regulation”, 15 March 2016, SSRN Academic Papers portal, at p.9.

<sup>18</sup> According to O’Donoghue and Pasco, *op. cit.*, this provision recognises the inherent limitations in mobile technology, and conforms with BEREC’s position: “*that it may be harder to measure quality in the context of mobile access services [...] and may mean that greater flexibility would be required in the context of interpreting the concept of “necessity” in a mobile sphere due to difficulties of a singular quality measurement*”.

### 3. Scope of Traffic Management Practices

The common rules established under Article 1(1) of the *TSM Regulation* are subject to the exception that prioritisation of traffic may occur where it reflects a “*reasonable traffic management measure*” pursuant to the terms of Article 3(3), irrespective of whether the traffic in question meets the specific requirements for “specialised services” under Article 3(5).<sup>19</sup> While the *TSM Regulation* prohibits the “*blocking, slowing down, altering, restricting, interfering with, degrading or discriminating between specific content, applications or services, or specific categories of content, applications or services*”, it acknowledges that there may be legitimate traffic management practices such as data compression (without content modification). These are common practices used by mobile operators to reduce congestion, improve QoS and speed.<sup>20</sup>

For mobile network operators, traffic volumes can be very difficult to predict, especially given the varying number of users at certain periods and in certain locations. Given the existing capacity constraints, there is a high likelihood that QoS levels and speed of content delivery would be compromised where such congestion occurs.<sup>21</sup>

The use of the ‘proportionality principle’, which is a general principle of Community law, lies at the heart of what is deemed to be permissible under the *TSM Regulation* to govern traffic management measures. Where traffic management measures need to go beyond what might be considered to be ‘reasonable’ in the circumstances, specific measures are foreseen which might be necessary to prevent impending network congestion, given the tendency of mobile networks to suffer from heavy congestion for temporary or exceptional periods (*i.e.*,

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<sup>19</sup> BEREC has expressed the view that: “[t]raffic management makes available technical schemes (e.g., access tiering and prioritisation for quality) [...]. For example, specialised services – that is traffic treated in order to provide guaranteed characteristics (e.g., end-to-end quality or security) connected to higher prices – technically rely on traffic management techniques and access restrictions”. Refer to BoR (12) 132, at para. 88.

<sup>20</sup> Recital 11 of the *TSM Regulation* declares that: “Rules against altering content, applications or services refer to a modification of the content of the communication, but do not ban non-discriminatory data compression techniques which reduce the size of a data file without any modification of the content. Such compression enables a more efficient use of scarce resources and serves the end-users’ interests by reducing data volumes, increasing speed and enhancing the experience of using the content, applications or services concerned”. See also R. O’Donoghue and T. Pasco, *Supra.*, at p.7.

<sup>21</sup> Article 4(1)(d) of the *TSM Regulation* provides that: “[...] a clear and comprehensible explanation of the minimum, normally available, maximum and advertised download and upload speed of the internet access services in the case of fixed networks, or of the estimated maximum and advertised download and upload speed of the internet access services in the case of mobile networks, and how significant deviations from the respective advertised download and upload speeds could impact the exercise of the end-users’ rights laid down in Article 3(1)”. First, Congestion across the network is inevitable even where ISPs continue to invest in the performance of the network; Second, Internet access on mobile networks has performance restrictions which are not within the full control of the ISP (such as the end-users location, the capacity and usage of the cell or even weather conditions); and third, ISPs cannot set a specific performance rate, this can only be reasonably guaranteed on the basis of an estimated minimum/maximum speed. According to O’Donoghue and Pasco: “[T]his in turn rather begs the question of whether the baseline should be the “minimum” or the “normally available” speed or something else and if so, what these are and whether this should be measured on an individual or average basis. It would seem wrong that a particularly inefficient operator should be allowed to take advantage of its inefficiency and use as a low baseline over which it could then offer higher quality non-internet access services (assuming of course that efficiencies are objectively available to that operator but it has simply decided to, e.g., chronically under-invest). Equally, it would be too demanding to take the “maximum” speed as a benchmark, given that Article 3(5) should not be interpreted in such a way that stifles innovation”. See R. O’Donoghue and T. Pasco, *op. cit.*, at p.4.

during on-peak times) (Recital 15). Long term congestion needs to be addressed by the network operator through investment in additional capacity, while making available the necessary capacity for the provision of any “specialised services” without degrading the quality of general Internet access services (Recital 17).<sup>22</sup> Beyond the normative principles set forth in Article 3(3) on the scope of legitimate traffic management techniques, ISPs will exceptionally be permitted to discriminate between certain traffic as to content where specific public policy imperatives are present, but only for as long as is necessary.<sup>23</sup>

Because the principles outlined in the *TSM Regulation* are very broad in their scope, it is inevitable that their precise application will result in much speculation, especially given the many conflicting views in the debates among stakeholders leading to the adoption of the *TSM Regulation*.<sup>24</sup> BEREC has been assigned with the unenviable task of conducting a consultation over the summer months of 2016 in order to illuminate its drafting of guidelines by the end of August 2016, which will flesh out the concepts set forth in the *TSM Regulation*. In clarifying the concepts linked to the need for ISPs to act ‘reasonably’, ‘proportionately’ and with ‘objective justification’, it will be important that BEREC adopt a consistent doctrinal approach that can facilitate a consistent, principled basis for intervention across all EU Member States that minimises the risks of different analytical approaches being adopted and Type 1 or over-regulation errors being made.

### III. Resolving Ambiguity - The Four Levers of Interpretation

Given that the principles framing Net Neutrality obligations contained in the *TSM Regulation* are fundamentally normative in character, and hence not susceptible to *ex ante* certainty, it is only reasonable to interpret their application to ISPs in the mobile sector by reference to a range of analytical, technological and institutional factors that are key to resolving existing drafting ambiguities.

There are *four* key levers of interpretation which can be identified that are relevant to the issue of how the ambiguity in the scope of obligations imposed under the *TSM Regulation* should be resolved *vis-a-vis* ISPs in the mobile sector, namely:

- an appreciation of the significance of key Recitals in the *TSM Regulation*, both insofar as they establish *ex post* standards of analysis regarding the manner in which the

<sup>22</sup> The growing practice of ad blocking is considered in the Tune Report, “Mobile Ad Blocking 2016”, March 2016, by J. Koetsier; *cf.* Mindshare, “The Rapid Growth of Ad Blocking”, by H. E. Lohne & J. Malmad; *cf.* TechCrunch, “Ad Blocking: A Primer”, of 16 January 2016.

<sup>23</sup> Article 3(3) specifies that such conditions can range from the need to: (a) comply with EU law or EU-compliant national law; (b) preserve the integrity and security of the network; or (c) prevent impending network congestion.

<sup>24</sup> For an overview of the views submitted by various stakeholders, refer to: (i) those organisations who strongly value ‘pure’ Net Neutrality: [European Digital Rights](#) (EDRi), [La quadrature du net](#) (France), [Bits of Freedom](#) (Netherlands); [AccessNow](#); and the various organisations within [savetheinternet.eu](#); (ii) [BEUC](#), the European Consumer Organisation; and (iii) those organisations in the telecommunications sector, such as: the [European Telecommunications Network Operators Association](#) (“ETNO”) - which calls for a broader definition of “specialised services”, greater flexibility in traffic management and establishment of minimum QoS levels only in cases of significant market failure; *cf.* the [GSMA](#), who takes the position that the Commission’s proposal for Net Neutrality risks reducing operators’ flexibility in offering customised services *i.e.*, limiting consumer choice and operator incentives to invest in infrastructure; see also [BusinessEurope](#), which has also underlined the concern that any *ex ante* regulatory measures, if adopted, should avoid having any negative impact on private broadband investment.

crucial issue underpinning Net Neutrality policy – the principle of non-discrimination – is to apply, and to the extent to which those Recitals are determinative in the interpretation of key provisions;

- an understanding of the full range of technical and regulatory constraints to which mobile operators are uniquely subject, which necessitate that mobile operators engage in traffic management techniques in relation to their networks;
- a more balanced view of the efficiencies flowing from certain commercial practices and a broader view of the consumer welfare benefits that flow from differential treatment, consistent with the terms of the *TSM Regulation*; and
- an understanding that the perceived market failures flowing from the breach of Net Neutrality principles can be effectively addressed through the application of competition law principles, irrespective of the specific institutions responsible for the implementation of the *TSM Regulation*.

Each of these points is discussed below.

### 1. The competition-centric content of Recitals in the *TSM Regulation*

The proposition that relevant provisions of *TSM Regulation* should be interpreted in a manner that is consistent with *ex post* principles is reflected in a series of Recitals, including the following:

- **Recital 7**, which provides that, *inter alia*: (i) end-users are in principle free to agree with providers of Internet access services tariffs for specific data volumes and speeds; (ii) such agreements should not circumvent the those provisions safeguarding Internet access; (iii) NRAs or/and competent authorities should be empowered to intervene in relation to those “*agreements or commercial practices*” which “*by reason of their scale, lead to situations where end-users’ choice is materially reduced in practice*”; (iv) any intervention should take into account factors such as the respective market positions of those providers of Internet access services, and of providers of content, applications and services; and (vi) intervention will be required when the impugned agreements or practices “*would result in the undermining of the essence of the end-users’ rights*”.
- **Recital 8**, according to which the non-discrimination principle shall apply to Internet access services across all relevant parameters (*i.e.*, irrespective of the identity of the sender or receiver, content, application or service), “*according to general principles of Union law and settled case-law*”, based on the principle that “*comparable situations should not be treated differently and different situations should not be treated in the same way unless such treatment is objectively justified*”.
- **Recitals 9-15** provide guidance as to the interpretation of Article 3(3) of the *TSM Regulation*, insofar as they establish a logical structure whereby: (i) reasonable traffic management measures can be implemented on the basis of objectively different QoS requirements for specific categories of traffic, but “*not on the basis of commercial considerations*”, while also being proportional and in place for only as long as is necessary; and (ii) traffic management measures going beyond such reasonable measures can only be justified on the basis of three narrowly construed public policy

exceptions (*i.e.*, to comply with EU-compliant legislative acts, to protect the integrity and security of the network, and to prevent impending network congestion).

- **Recitals 16-17** provide guidance as to the interpretation of Article 3(5) of the *TSM Regulation*, by providing that the providers of content, applications and services *other than Internet access services* (*i.e.*, “specialised services”) are free to provide such services where there is a need for traffic optimisation driven by the *necessity* for such services to achieve specific levels of quality.<sup>25</sup> Unlike the treatment of traffic management measures under Article 3(3), however, there is no express prohibition of the use of commercial considerations serving as the basis for traffic optimisation where such specialised services are offered, while services provided to customers falling within Closed User Groups, even where those customers receive Internet access services, fall outside of the scope of the Regulation. Constraints on ISPs come in the form of a general commitment that they should seek to develop sufficient capacity to provide such specialised services.

#### a) *Policy rationale underpinning the Recitals*

The impact of these Recitals accords with a view of Net Neutrality that is based on the logic and flexibility of competition policy, allowing each situation to be judged on its own merits and acknowledging that the consumer welfare implications of many types of conduct are different, and often very complex in their commercial impact. Given the multitude of tariff/capacity plans and business models emerging over the Internet, the application of competition policy seems far less susceptible to over-regulation (*i.e.*, a Type I error scenario) than the usual blunt, “*one size fits all*” approach which we find in *ex ante* disciplines. If this were not the case, the significance of Recital 8 would be undermined, as it is only the competition standard of “discrimination” that has been the subject of Community case-law precedent.<sup>26</sup> This is to be contrasted with the sort of sector-specific regulatory standard that has developed over time for the concept of discrimination, for example, the tendency has been to target most forms of *ex ante* access regulation in bottleneck situations, which in turn means that all parties are treated in an identical manner on the basis of a LRAIC cost model (or variants thereof); in the absence of such bottlenecks, however, access pricing evolves into “Cost Plus” models which take into account a greater level of competition in the marketplace.<sup>27</sup>

<sup>25</sup> As a matter of strict legislative interpretation, the author agrees with O’Donoghue and Pasco (*op. cit.*, at p. 6), who conclude that, in the context of Article 3(5) of the *TSM Regulation*, “*the concept of necessity [...] is not only independent of how that concept would be defined in other contexts under EU law, but is even distinct from how necessity is defined in other aspects of the Regulation*”. Therefore, while the exemptions under Article 3(3) provide a list of very specific limitations, what is deemed to be ‘necessary’ under Article 3(5) should be open to a very general interpretation.

<sup>26</sup> Refer to the Communication from the Commission: “Guidance on the Commission’s enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings”, OJ C 45, 24.2.2009, pp. 7–20, and especially to the cases cited therein. Reference to the concept of “equality” in the context of a non-discrimination obligation, must be read consistently with the application of Recital 8 of the *TSM Regulation*.

<sup>27</sup> Examples of LRAIC pricing can be found in relation to call termination charges where each network is deemed to constitute a “market” in its own right (see Commission Recommendation of 7 May 2009 on the Regulatory Treatment of Fixed and Mobile Termination Rates in the EU, OJ L 124, 20.5.2009, pp. 67–74), while “cost plus” (LRAIC+) pricing models are seen to be more appropriate in relation to many MVNO access arrangements, fundamentally because society benefits from greater network rollout, rather than service-based competition which only replicates the services already provided by a network owner.

This working presumption that competition policy standards of behaviour should apply is supplemented by the detail of Recital 7, which leaves no margin for debate that the *TSM Regulation* anticipates the application of a realistic market-based approach in each case; in doing so, it emphasises that it will only be “*material reductions*” in consumers’ rights that will attract intervention to the extent that the “*essence*” of those rights is affected. This is a standard wholly at odds with the absolutism of *ex ante* standards, where no consumer welfare test is conducted,<sup>28</sup> but is wholly consistent with an approach which avoids intervention where the anticipated effects on the relevant affected market are *de minimis*.

The working presumption that a competition policy standard of intervention should apply in the enforcement of Net Neutrality rules is further supported by the following elements of the *TSM Regulation*, including:

- The references to “agreements” and “commercial practices” (see Recitals 7 and 17) are consistent with an approach that envisages the application of Article 101 TFEU (the prohibition on anti-competitive agreements) alongside Article 102 TFEU (abuse of dominance).<sup>29</sup> By contrast, *ex ante* regulation is focused on the unilateral behaviour of firms with market power. Consequently, it would be wrong to say that a competition policy-based approach would only be limited to instances where an ISP was found to be dominant,<sup>30</sup> and hence insufficient to a broader range of market failures. Indeed, EU policy consistently takes the view that vertical restraints are legitimately the subject of review where 30% of a relevant market has been affected.<sup>31</sup> It is just as clear that incentives to degrade Internet connectivity are more likely to occur either where market share is so significant that a market might ‘tip’ in favour of the dominant firm,<sup>32</sup> or where agreements are entered into with strategically placed content providers, as ISPs are usually compromised in their ability to exercise unilateral market power in the Internet environment.
- The fact that the legislation does not presume that NRAs are to exercise exclusive competence over Net Neutrality matters (the reference to “competent authorities” in Recital 7) suggests that, among others, NRAs might not always be deemed to be the most appropriate bodies to address such matters. Indeed, given the overarching aim of EU regulatory policy in the electronic

<sup>28</sup> The various policy criteria set forth in Article 8 of the *Framework Directive* (2002/21/EC) arguably encapsulate a variety of industrial policy goals, but are not focused on consumer welfare.

<sup>29</sup> The [European Parliament study](#), “Network Neutrality Revisited: Challenges and Responses in the EU and in the US” (IP/A/IMCO/2014-02, PE 518.751), December 2014, recognises that it is *dominant* network operators that are more likely to engage in discriminatory practices insofar as affecting other operators, content and application service providers, so as to adversely affect the conditions for innovation and investment in new and innovative products and services.

<sup>30</sup> Or its *ex ante* equivalent, Significant Market Power (“SMP”).

<sup>31</sup> For example, refer to discussions in: the Guidelines on Vertical Restraints, OJ C 130, 19.5.2010, pp. 1–46; the Commission Regulation (EU) No 330/2010 of 20 April 2010 on the application of Article 101(3) of the Treaty on the Functioning of the European Union to categories of vertical agreements and concerted practices, OJ L 102, 23.4.2010, pp. 1–7; and the Communication from the Commission: Guidelines on the application of Article 101 of the Treaty on the Functioning of the European Union to technology transfer agreements, OJ C 89, 28.3.2014, pp. 3–50.

<sup>32</sup> See the logic of the Commission in Case No COMP/M.1741 - *MCI WorldCom / Sprint* (2000).

communications sector to be replaced by competition rules,<sup>33</sup> Net Neutrality appears to be the perfect starting point for that transition from regulatory specifics to competition standards. The combined competition policy/regulatory powers of bodies such as OFCOM in the UK and the EETT in Greece, coupled with the fully integrated regimes in place with the ACM in the Netherlands and CNMC in Spain, suggest that the task of implementation need not involve such a seismic shift in enforcement strategy in many EU Member States. Indeed, given the fact that the electronic communications value chain is today focused on the Internet, a paradigm shift of this nature is arguably necessary more generally in the revised *Regulatory Framework* for electronic communications that is scheduled to be tabled by the end of 2016.<sup>34</sup>

- The absolute prohibitions on the practices of “blocking” and “throttling”, on the one hand, and the more liberal regime that is supposed to apply as regards the treatment of traffic prioritisation for the purposes of traffic management (Article 3(3)) and “specialised services” (Article 3(5)), on the other, broadly reflect the differences between competition law infringements “by object” and those “by effect” (see Recitals 16 and 17).<sup>35</sup> The practices of blocking and throttling are equivalents to constructive refusals to deal which are addressed by the overarching public policy goal of protecting consumers (in a B2C relationship); as such, they would be considered to be problematic by object given the overarching regulatory policy dictate of Net Neutrality that consumers must be able to access all parts of the Internet without discrimination. The flip-side of this policy is the recognition in *TeliaSonera*<sup>36</sup> that an absolute regulatory obligation on an undertaking to supply is sufficient

<sup>33</sup> Refer to the European Commission, “Towards a new framework for Electronic Communications infrastructure and associated services: The 1999 Communications Review, Communication from the Commission to the European Parliament, the Council, the Economic and Social Committee and the Committee of the Regions”, COM (1999) 539, at p.VI. See also the Commission Recommendation on relevant product and service markets within the electronic communications sector susceptible to *ex ante* regulation, 9.10.2014 C(2014) 7174 final (*Relevant Markets Recommendation*) at para. 1. See discussion in P. Alexiadis and M. Cave, “Regulation and Competition Law in Telecommunications and Other Network Industries”, *The Oxford Handbook of Regulation*, Oxford University Press (2010), at pp. 500-522.

<sup>34</sup> Refer to the European Commission’s Press Release, “Q&A - Commission launches a 360° review of telecoms rules and seeks views about future needs for Internet speed and quality”, 11 of September 2015 (available at: <https://ec.europa.eu/digital-single-market/en/news/qa-commission-launches-360deg-review-telecoms-rules-and-seeks-views-about-future-needs-internet>).

<sup>35</sup> See P. I. Colomo, “Article 101 TFEU and Market Integration”, forthcoming in 12 *Journal of Competition Law & Economics* 2016, who provides (at p.7) that under EU competition law rules certain agreements may be restrictive where the terms of those agreements limit rivals’ access (*i.e.*, while certain agreements may not be restrictive by object, they may be by effect). Refer also to P. I. Colomo, “Beyond the ‘More Economics-Based Approach’: A Legal Perspective on Article 102 TFEU Case Law”, forthcoming in 2016 53 *Common Market Law Review*, who explains that the European Courts have successfully transposed into Article 102 TFEU the case-law (dealing with exclusive dealing, predatory pricing and tying), that has been well-established in the context of Article 101(1) TFEU: “*When determining whether an agreement is restrictive by its very nature, the EU courts essentially examine whether the restraints contained in it are objectively justified or pursue a legitimate objective. If they come to the conclusion that they are a plausible means to achieve a pro-competitive aim, the EU courts exclude the ‘by object’ qualification and examine their effects on the relevant market(s) concerned*”. In this context, refer to Case T-203/01, *Manufacture française des pneumatiques Michelin v Commission* (*‘Michelin II’*) [2003] II- 4071, at para 241: “*if it is shown that the object pursued by the conduct of an undertaking in a dominant position is to limit competition, that conduct will also be liable to have such an effect*”.

<sup>36</sup> See Case C- 52/09, *Konkurrensverket v TeliaSonera Sverige AB* [2011] ECR I-527.

to establish a normative rule that a refusal to deal in the same circumstances is not permissible under EU competition rules. By contrast, genuine traffic management practices (as defined, and subject to the competition policy principle of “objective justification”), and the provision of “specialised services” which are in general directed at B2B relationships, will be subject to what is tantamount to a ‘rule of reason’ analysis that anticipates the likely effects of a problematic agreement or commercial practice on the overall marketplace.<sup>37</sup> To this end, the provision of “specialised services” is *not even* restricted by reference to the satisfaction of pricing obligations, it being understood that that this pricing freedom for an ISP is a necessary policy trade-off in order for society to obtain the benefits of innovation and the promotion of consumer welfare.<sup>38</sup> That express omission from the terms of Article 3(5) must be contrasted with the fact that pricing considerations cannot be taken into account when traffic management is being expressed under Article 3(3).<sup>39</sup> Such consumer welfare trade-offs lie at the heart of competition policy enforcement in cases of alleged discrimination and are also embodied in the thinking that underpins Article 101(3) TFEU.<sup>40</sup> Indeed, preconceived ideas

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<sup>37</sup> In the case an absolute capacity shortage, however, the CJEU (Case C-77/77, *Benzine en Petroleum Handelsmaatschappij BV v Commission*, Judgment of 29 June 1978 ECR 1513), confirmed that, under competition rules, a dominant undertaking is able to favour its traditional customers.

<sup>38</sup> For a discussion of the benefits of price discrimination, both within and outside the context of Net Neutrality, refer to M. Cave & P. Crocioni, “Net neutrality in Europe”, *Communications & Convergence Review* 2011, Vol. 3, No. 1, at pp. 57-70. See also Office of Fair Trading, *Guideline Assessment of Individual agreements and conduct*, OFT, at para. 3.8 (“*Price discrimination between different customer groups can be a means of [recovering common costs]; it can increase output and lead to customers who might otherwise be priced out of the market being served. In particular, in industries with high fixed or common costs and low marginal costs it might be more efficient to set higher prices to customers with a higher willingness to pay*”). Refer also to G. Niels, H. Jenkins, J. Kavanagh, “Economics for Competition Lawyers”, Oxford University Press (2011), at pp.216-218; K. Maniadaki, “EU Competition Law, Regulation and the Internet: The Case of Net Neutrality”, Wolters Kluwer, Netherlands, 2015, at pp. 151-155. Refer also R. O’Donoghue and J. Padilla, “The Law and Economics of Article 102 TFEU”, Hart Publishing, 2<sup>nd</sup> Edition (2013); refer to the discussion on “Welfare Effects of Price Discrimination” (at pp. 784-787), where the authors conclude that price discrimination: (i) generally leads to higher profits for suppliers; (ii) can lead to a higher output, depending on the circumstances; (iii) can put some firms at a competitive disadvantage (where inputs are at issue); and (iv) can lead to lower input prices overall. See also, A. J. Cox, “The Frequently Forgotten Benefits of Price Discrimination”, *Economics of Antitrust* (L. Wu, editor), NERA (2004), at pp. 99-107, who explores the pro-competitive benefits flowing from price discrimination practices as including: (i) its use as part of a competitive distribution strategy; (ii) as a way of meeting market-specific demands; (iii) as preventing inefficient backward discrimination; and (iv) as preventing tacit coordination.

<sup>39</sup> In this regard, O’Donoghue and T. Pasco, also conclude that the inclusion/exclusion of pricing considerations in two separate Articles of the *TSM Regulation* must have unavoidable implications as regards the interpretation of those respective (*op. cit.*, at Section C).

<sup>40</sup> Article 101(3) TFEU foresees the exemption from the Article 101(1) prohibition in circumstances where two sets of positive and negative conditions can be fulfilled, namely: (i) the agreement must contribute to improving the production or distribution of products or contribute to promoting technical or economic progress *i.e.*, lead to efficiency gains; (ii) the restrictions must be indispensable to the attainment of those objectives; (iii) consumers must receive a fair share of the resulting benefits, that is to say, the efficiency gains, including qualitative efficiency gains, attained by the indispensable restrictions must be sufficiently passed on to consumers so that they are at least compensated for the restrictive effects of the agreement (hence, efficiencies only accruing to the parties to the agreement will not be sufficient); and (iv) the agreement must not afford the parties the possibility of eliminating competition in respect of a substantial part of the products in question. Refer also to para. 49 of the Communication from the Commission Guidelines on the applicability of Article 101 of the Treaty on the Functioning of the European Union to horizontal co-operation agreements, OJ C 11, 14.1.2011, pp. 1–72.

about the effects of discriminatory practices in the “new economy” should be subject to careful scrutiny for, as Baumol & Swanson conclude: “*In a market where price discrimination is feasible and where competitive pressures are sufficiently strong, the market can be expected to force a firm with scale economies to adopt discriminatory pricing and to adopt just those prices that are sufficient to yield maximum profits. For firms that face competition and heavy sunk or fixed costs, those that can discriminate must do so. This observation can lead to a radically different picture of the ways in which effectively competitive markets work*”.<sup>41</sup> The statement quoted seems to be particularly apt when considering the majority of mobile markets across the EU Member States.

- The omission from the terms of the *TSM Regulation* of any reference to a ban of the practice of “zero-rating”, especially given the existing Net Neutrality rules banning such practices in jurisdictions such as the Netherlands,<sup>42</sup> Slovenia<sup>43</sup> and Norway<sup>44</sup> prior to the adoption of the *TSM Regulation*, also support the fact that a more nuanced, fact-specific approach needs to be taken that is consistent with competition policy norms. Indeed, the Commission has itself confirmed the view that zero-rating “*does not block competing content and can promote a wider variety of offers for price-sensitive users, give them interesting deals, and encourage them to use digital services*”.<sup>45</sup> Such a normative view is a long way removed from the clear rule-making that one associates with *ex ante* regulation and is wholly consistent with the approach adopted under competition rules; by contrast, the roaming pricing aspects of the *TSM Regulation* are clear in their prescription that tariff information must be provided for free (*i.e.*, zero-rated).<sup>46</sup>

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<sup>41</sup> See W. J. Baumol & D. G. Swanson, “The New Economy and Ubiquitous Competitive Price Discrimination: Identifying Defensible Criteria of Market Power,” *Antitrust Law Journal* 70 (2003), pp. 661-685, at p. 684.

<sup>42</sup> Refer to the Netherlands Department of Economic Affairs, Net Neutrality Guidelines May 15th, for the Authority for Consumers and Markets (ACM) for the enforcement by ACM of Article 7.4a of the Netherlands Telecommunications Act 2012 (2015). Article 7.4a mandates that “*providers of Internet access services shall not make their charges for Internet access services dependent on the services and applications which are offered or used via said services*”.

<sup>43</sup> Refer to “No. 003-02-10/2012-32” (available at <http://www.uradni-list.si/1/content?id=11144>).

<sup>44</sup> See the guidelines at Nkom, “Net Neutrality” (2014) (available at <http://eng.nkom.no/technical/internet/net-neutrality/net-neutrality>).

<sup>45</sup> See the Commission’s Press Release “Roaming charges and open Internet: questions and answers”, 30 June 2015. In addition, zero-rating practices are used as a tool whereby mobile network operators are able to differentiate themselves by offering customised content with their own services, which can effectively strengthen competition between the different providers. Further: (a) ISPs have incentives to maintain a diversity of actual and potential content providers and are therefore not likely to participate in activities that could possibly foreclose competition; (b) the most common zero-rating programs are carrier initiated and thus, do not require financial compensation from the content provider; (c) many small content providers engage in zero-rating; and, (d) zero-rating critics have not demonstrated any harm *per se* to competition or consumers from zero-rating, or even evidenced harm to individual competitors. Refer to J. A. Eisenach, “The Economics of Zero Rating”, *op. cit.*, at p.7.

<sup>46</sup> The policy decision not to ban zero-rating practices outright was foreseen by Commissioner Oettinger in his answer to a question on zero-rating put forward by the European Parliament on the 15 January 2016. Commissioner Oettinger also tacitly acknowledges that EU competition law rules are enough to deal with any such concerns arising for anticompetitive zero-rating practices. (<http://www.europarl.europa.eu/sides/getAllAnswers.do?reference=E-2015-014462&language=EN>). Indeed, the reaction of [Dutch](#), [Slovenian](#) and [Norwegian](#) officials to the adoption of the *TSM Regulation* is  
(*Cont'd on next page*)

- The idea that foreseeable and long-term capacity constraints should be addressed, where possible, by forward-looking capacity investment decisions by ISPs (see Recitals 15, 17 and 19) is a concept that is in fact based on the Commission's competition law enforcement strategy in the energy sector,<sup>47</sup> rather than on existing regulatory models in the electronic communications sector.<sup>48</sup> In an industry characterised by disruptive technology and shorter innovation cycles, long-term capacity planning is fraught with uncertainty. One therefore needs to be very cautious in making assumptions about the scale and scope on which mobile operators can make such long term, forward-looking investments. It would appear that only the case-by-case approach of competition law policy can achieve an appropriate result in the particular circumstances of each case.
- Finally, the fact that there are a number of references in the *TSM Regulation* to the effect that mobile networks have unique capacity management constraints (Recitals 15 and 17) suggests that technology neutrality is not a mantra that will apply with respect to issues such as the application of the non-discrimination principle, the conduct of traffic management practices and the introduction of special services. This provides yet another example of why the fact-specific approach pursued by competition policy is the most effective means of implementing the normative rules set forth in the *TSM Regulation* as regards Net Neutrality.

#### ***b) Use of the Recitals as a necessary interpretative tool***

The position that competition-specific thinking found in the Recitals to the *TSM Regulation* should steer the direction of the rules regarding Net Neutrality is also complemented by our understanding of the particular role and function of a legislative instrument such as a Regulation in the EU legal hierarchy. Thus, a Regulation is an EU legal instrument that should in theory be binding in all respects and which is directly applicable in each Member State (see Article 288 TFEU) on the day it is due to enter into force. Unlike a Directive, which requires specific transposition by national Parliaments to form part of the corpus of national law, a Regulation creates rights and obligations that are in principle directly applicable to the citizens of the European Union.<sup>49</sup>

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instructive, insofar as they each interpret its provisions as running counter to their own existing national rules prohibiting zero-rating practices.

<sup>47</sup> For example, refer to the Commission merger Decisions in the energy sector: Case No COMP/M.1853 – *EDF/EnBW*, Commission Decision of February 7 2001; Case No COMP/M.2947 - *Verbund/EnergieAllianz*, Commission Decision of 11 June 2003; Case No COMP/M.3696 - *E.ON/MOL*, Commission Decision of 21 December 2005; Case No COMP/M.3868-*DONG/Elsam/Energi E2*, Commission Decision of 14 March 2006; and Case No COMP/M.3440 - *EDP/ENI/GDP*, Commission Decision of 9 December 2004.

<sup>48</sup> See, for example, the European Commission's *Explanatory Note* (Brussels, 9.10.2014, SWD(2014) 298) accompanying the Commission Recommendation on relevant product and service markets within the electronic communications sector susceptible to ex ante regulation in accordance with Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communications networks and services, 9.10.2014 C(2014) 7174 final (*Relevant Markets Recommendation*); and Commission Recommendation 2010/572/EU of 20 September 2010 on regulated access to Next Generation Access Networks (NGA), OJ L 251, 25.9.2010, pp. 35-48.

<sup>49</sup> Case 43/7, *Politi v Italy* [1971] ECR 1039; and Case 39-72, *Commission v Italy* [1973] ECR 101.

Because a Regulation establishes EU legal principles which override national law, it logically follows that it must establish clear principles on its face which do not allow for any discretionary application of Member-State specific measures, as would be the case where a Directive is being adopted into national law. Seen in this light, the texts of the Recitals to the *TSM Regulation* have particular interpretative significance. Because the Net Neutrality provisions set forth in the *TSM Regulation* reflect general principles which lack specificity, it is difficult to imagine how they (as opposed to the provisions regarding roaming) would be capable of creating any enforceable legal rights in EU citizens, given their very general normative nature, *unless* the Recitals of the Regulation were to be given full effect; this would in turn allow regulatory institutions to incorporate competition standards gleaned from the Treaty itself and from case precedents of the European Courts.<sup>50</sup>

It is clear that Recitals can help to explain the purpose and intent behind a normative instrument. They can also be taken into account to resolve ambiguities in the legislative provisions to which they relate.<sup>51</sup> Where, as is the case of the *TSM Regulation*, the corresponding substantive provisions in the operative part of the Regulation cannot have specific meaning without recourse to the text of the Recitals, the European Courts will rely on the wording of the Recitals, at least insofar as the Recitals do not derogate from the Articles in the Regulation.<sup>52</sup> As has been explained above, the Recitals in the *TSM Regulation* are arguably the only coherent basis upon which the very general provisions of the Articles covering Net Neutrality can be applied in practice. As such, they should be considered to be highly persuasive in our understanding of the scope of the Articles themselves. If that were not the case, the role and effectiveness of a body such as BEREC in developing working guidelines by August 30 2016 to a Regulation which is supposedly already in effect as of 30 April 2016, must be open to question. Indeed, it is arguably the case that, in the absence of giving full effect to the Recitals, the credentials of the *TSM Regulation* as an enforceable legal instrument are called into question.<sup>53</sup>

## 2. The Imperative of Traffic Management in a Mobile Environment

As noted above, the *TSM Regulation* recognises expressly that mobile networks can be subject to very particular technological challenges in their traffic management plans (Recitals

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<sup>50</sup> Such an approach also has the benefit of being analytically coherent with the broader regulatory framework for electronic communications, where the Commission has veto powers with respect to the market definition and the market power aspects of its market analysis function (because they are subject to competition law case precedents), but NRAs are only obliged to take “the utmost account” of the Commission’s views on remedies (as this is an area not subject to any prevailing competition law standard of review beyond general doctrinal principles of “proportionality”). Refer to Articles 14-16 of the *Framework Directive*.

<sup>51</sup> For example, see Case C-244/95, *Moskof* [1997] ECR I-6441, at paras. 44 and 45. Recitals can help to establish the purpose of a provision (Case C-173/99, *BECTU* [2001] ECR I-4881, at paras. 37-39) or its scope (Case C-435/06, *C* [2007] ECR I-10141, at paras. 51-52). See also: Case 215/88, *Casa Fleischhandels* [1989] ECR 2789, at para. 31; Case C-162/97 *Nilsson* [1998] ECR I-7477, at para. 54; Case C-412/93, *Edouard Leclerc-Siplec* [1995] ECR I-179, at para. 47; Case C-308/97, *Manfredi* [1998] ECR I-7685, at para. 30; and Case C-136/04, *Deutsches Milch-Kontor* [2005] ECR I-10095, at para. 32.

<sup>52</sup> Refer to Case C-162/97, *Nilsson* [1998] ECR I-7477, at para. 54.

<sup>53</sup> *Query* the enforceability of a Regulation which does not specify a well understood regime of delegated legislation to classify unspecified details in the legislation, as opposed to hitherto unforeseen guidelines from a pan-European regulatory body (BEREC), the enforceability of whose decisions is in any event questionable.

15 and 17). With mobile data traffic continuing its tremendous growth path (due to the demand for bandwidth-rich services), traffic management across mobile networks constitutes a significant challenge to mobile operators' businesses, especially as it might compromise their network security and integrity concerns or their ability to deliver specialised services, satisfy data caps, and so forth. It is instructive to consider the impact of those technological challenges on mobile operators, in addition to those raised also by regulatory arrangements affecting the mobile industry.

**a) Lack of a realistic “build-out” option**

Wireless broadband networks inherently have much lower capacity than fixed-line networks, since one is a shared medium whereas the other may or may not be.<sup>54</sup> Moreover, since spectrum is a finite resource (whereas fixed capacity is not, subject to economic constraints) it is inevitable, in the absence of effective network management techniques, mobile networks will experience the sort of capacity constraints to which fixed networks may not be subject. For example, a single fiber-optic cable has the ability to carry a much greater data capacity than the entire radio frequency spectrum available in the marketplace. Therefore, only a handful of data-intensive (smartphone) mobile users (who utilise high bandwidth-intensive applications) are able to consume an entire mobile operator's wireless network capacity.<sup>55</sup> Unlike fixed operators, who can much more readily invest in the deployment of new fibre technology to replace their existing copper-based networks, the option to invest large amounts of money into new cell sites or to increase the deployment of spectrum into the marketplace are often not a realistic option for mobile operators, either because local authorities restrict such cell site expansion or because governments or regulators do not make available the right amount of spectrum at a viable price.

In the absence of being able to invest in such network expansion measures, mobile operators will increasingly need to engage in optimised traffic management techniques (including the use of data compression technology, as envisaged in Recital 11)<sup>56</sup> to deliver high quality service broadband applications. In turn, if they are not able to deliver such high quality applications, they will not be able to generate the data streams necessary to help fuel next generation network investment.<sup>57</sup> The possibility of such a veritable Catch-22 means that a

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<sup>54</sup> Refer to C. T. Marsden, “Network Neutrality: History, Regulation and Future”, IDP (Number 13), February 2012, I-ISSN 1699-8154, at section 2.3.

<sup>55</sup> Refer to the Rysavy Research report titled “*Net Neutrality Regulatory Proposals: Operational and Engineering Implications for Wireless Networks and the Consumers They Serve*”, of 14 January 2010, at p. 4.

<sup>56</sup> In this regard, while the position stated in the *TSM Regulation* appears to be reasonable at first blush as regards the inability of ISPs to base prioritisation or discrimination policies on the precise nature of data or the identity of the sender with respect to encrypted traffic, it is nevertheless the case that an ISP may at times need to know the identity of a user or the nature of the content being transmitted so as to more effectively calibrate the content with either the character of the network or even the mobile handset itself. Otherwise, the unintended consequence is that certain traffic might be de-prioritised (legitimately, according to the *TSM Regulation*), which might otherwise have been given more expedited treatment, because the ISP is in a better position to reconcile certain types of traffic with its network configuration and applications specialisations.

<sup>57</sup> Refer to M. Mace, “The Truth about the Wireless Bandwidth “Crisis”, June 2011 (<http://mobileopportunity.blogspot.de/2011/06/truth-about-wireless-bandwidth-crisis.html>).

restrictive interpretation of the traffic management and ‘QoS’ provisions of the *TSM Regulation* is counter-intuitive from the perspective of welfare enhancement.<sup>58</sup>

***b) Unforeseen regulatory impacts on mobile operators’ ability to manage traffic***

Technical reasons aside, mobile network operators are also obliged to engage in effective traffic management practices given that their ability to control capacity over their networks has been significantly compromised in the recent past as a result of important regulatory developments, namely: (i) the widespread use of network sharing among operators; (ii) the implications of “roam like at home tariffs”; and (iii) the rapid increase in significant capacity being set aside for MVNOs under merger reviews. The cumulative effect of these factors leads one to the conclusion that reasonable traffic management measures are an integral part of any mobile operator’s business operations, which will need to be undertaken by reference to an increasing number of QoS standards agreed between ISPs and content providers. In such circumstances, the logical policy imperative would be for Net Neutrality rules to be applied in a manner that acknowledges these network management pressures on mobile operators, as part of the “objective reasons” which justify particular aspects of traffic prioritisation.<sup>59</sup>

*(i) Network sharing*

Increasing investment costs in network deployment, including the acquisition of spectrum for next generation applications and the inherent difficulties in obtaining the rights to build new towers and expand existing towers, has driven many mobile operators across the EU to engage in network sharing agreements.<sup>60</sup> It is widely recognised that network sharing in the mobile industry removes those barriers to entry and enables new competitors to enter the market, thereby increasing competition while improving network coverage and QoS for consumers. Accordingly, network sharing arrangements have received widespread antitrust approval,<sup>61</sup> largely because of their potential to reduce operating costs for operators and

<sup>58</sup> For example, there are expectations of a dramatic increase in the growth of mobile cloud-based applications, with special characteristics regarding latency and bandwidth, which raise concerns about traffic management. These applications (*e.g.*, navigation applications such as “Google Maps”), are off-loaded to a cloud server and therefore require a reliable, low latency, high bandwidth connection to the Internet (*i.e.*, requiring effective traffic management in its own right, along with QoS priorities). The European Commission has also recently committed itself to the development of cloud computing technology: See Commission Press Release, “European Cloud Initiative to give Europe a global lead in the data-driven economy”, 19 April 2016.

<sup>59</sup> For example, refer to the discussions of “objective justification” in the context of discrimination in R. O’Donoghue and J. Padilla, “The Law and Economics of Article 102 TFEU”, *op. cit.*, at pp. 827-838; and in J. Faull & A. Nikpay, “The EU Law of Competition”, *op. cit.*, at p. 395.

<sup>60</sup> Network sharing is an arrangement under which MNOs agree to share parts of the radio access network (“RAN”) equipment and/or transmission network. In the mobile communications sector, network sharing is a common practice between MNOs which allows them to increase coverage and save costs. The extent of integration under network sharing arrangements varies, since MNOs may agree to share different parts of their network equipment. Two types of network sharing are usually distinguished from one another, namely, active (which involves the sharing of RAN equipment – requires equipment compatibility) and passive network sharing.

<sup>61</sup> See, for example, OECD (2014), “Wireless Market Structures and Network Sharing”, OECD Digital Economy Papers, No. 243, OECD Publishing. See, among others, Commission Decision of 1 March 2010 in Case COMP/M.5650 - *T-Mobile / Orange UK*, at para. 105; see also Commission Decision in Case No. COMP/M.6992 - *Hutchison 3G UK / Telefonica Ireland*, 28 May 2014, at paras. 760, 883 and paras. 920 to 924.

because they offer additional capacity in congested areas where the erection of additional towers may be restricted. Moreover, recent mobile sector merger approvals have conditioned clearance upon a commitment that the merging parties would create or maintain existing network sharing agreements with MVNOs,<sup>62</sup> while recently certain mobile sector mergers have been refused clearance precisely because the parties' commercial aims could have been achieved through less restrictive means, namely, through network sharing agreements.<sup>63</sup>

The phenomenon of network sharing means that the capacity available to individual mobile operators and MVNOs is shared and managed by more than one party.<sup>64</sup> This in turn raises major challenges in terms of traffic management for those parties sharing network facilities, especially where they seek to provide increasingly differentiated services. These issues confronting mobile operators are not usually held in common with their fixed line counterparts.<sup>65</sup> The other side of the competition policy coin of promoting network sharing should be matched by a competition policy-sensitive approach which acknowledges the capacity constraints imposed by policymakers themselves, rather than operators.

(ii) *Roaming-free environment*

Amendments to the EU's *Roaming Regulations*<sup>66</sup> have resulted in caps on the prices which mobile operators can charge customers when travelling outside of their home country (*i.e.*, the operator's home country). Under the most recent amendments effected by the *TSM Regulation*, roaming surcharges in the EU will be abolished as of 15 June 2017 (having been already reduced from current levels after 30 April 2016).<sup>67</sup> However, even after the abolition

<sup>62</sup> See, for example, the recent cases: Case No COMP/M.6497 - *Hutchison 3G Austria / Orange Austria*, 12 December 2012; Case No COMP/M.5650 - *T-Mobile / Orange UK*, of 1 March 2010; Case No COMP/M.6992 - *Hutchison 3G UK / Telefónica Ireland*, 28 May 2014; and Case No COMP/M.7018 - *Telefonica Deutschland / E-Plus*, 2 July 2014. It is understood that the Commission is also pursuing such policies in pending mobile merger cases.

<sup>63</sup> As has been apparently considered by the Commission in Case No COMP/M.7419 - *TeliaSonera/ Telenor/ JV* (2015) (ultimately [withdrawn](#) on 11 September 2015) and Case No COMP/M.7612 - *Hutchison 3G UK / Telefonica UK* ([blocked](#) on 11 May 2016).

<sup>64</sup> The impact of network sharing has obvious consequences in terms of traffic management practices. Thus, mobile operators sharing networks must first address the load-bearing capacity of their towers, available space within their sites, antenna-related issues which have an impact on QoS (especially where different standards are used by equipment vendors), while RAN sharing can have an adverse effect on QoS levels due to the reduction of signal strength when antennas are combined. Moreover, large user traffic demand for conventional wireless communications systems tends to increase the number of required access points or base stations per area in a mobile network, including an adverse scenario where communications services are severely affected by interference. Thus, an unexpected surge in traffic in a given area might not only affect a single mobile operator, but the traffic of all of those sharing the network.

<sup>65</sup> By the same token, the increase in LTE deployment is providing much more efficient spectrum allocation, as well as higher spectral efficiency. See the European Commission draft RSPG "Report on Efficient Awards and Efficient Use of Spectrum", 21 October 2015. The common practices of traffic shaping techniques can help to reduce network congestion, as well as operators compressing/lowering the bit-rate of highly demanded video content. The offloading of traffic from mobile to fixed can also help to reduce traffic congestion. Refer to the Solon Telecoms White Paper, "Mobile Data Growth: How Operators Can Handle the Traffic Explosion", by M. Sier, S. Kalleder and A. Pauly, May 2012.

<sup>66</sup> See Regulation (EC) No 717/2007 of 27 June, OJ L 171/32; Regulation (EC) No 544/2009 on roaming on public mobile telephone networks within the Community and the *Framework Directive op. cit.*; and Regulation (EU) No 531/2012, OJ L 172, 30.6.2012, pp. 10–35.

<sup>67</sup> Refer to Articles 6, 6f and 10 of the *TSM Regulation*.

of roaming charges, mobile operators will be able to apply a “fair use” policy to prevent the abusive exploitation of roaming by customers, including cost recovery by using roaming services for purposes other than periodic travel).<sup>68</sup>

In an environment in which mobile networks may experience congestion generated by roamers from other EU Member States, it seems only appropriate for local mobile operators to prioritise their own customers over those who are roaming across their network, especially where capacity consumption by those customers should in principle be limited by the “fair use” policy that applies to roamers and the fact that the cost to deliver a megabit of data can vary significantly from one Member State to another.<sup>69</sup> In this type of environment, an overly restrictive application of the Net Neutrality rules is likely to underestimate the policy impact of the “fair use” policy being pursued in the context of roaming.

*(iii) Widespread use of MVNO remedies*

Mobile operators are further compromised in their ability to manage traffic effectively and efficiently on their respective networks as a result of another, much more recent phenomenon, namely, the popularity of MVNO remedies among merger authorities, when mergers in the industry are approved. While the appeal and availability of MVNOs has been patchy across EU Member States until fairly recently, their accommodation has become a staple aspect of merger remedies in the mobile sector over the past few years.<sup>70</sup> Indeed, a popular remedy has consisted of the designation of sufficient capacity by the merged mobile operator to account for anything between 20-35% of its overall capacity so as to be able to act as the home network for anything between 2-16 MVNOs.<sup>71</sup> In these circumstances, with up to a third of its network capacity being assigned to MVNOs and the fact that it is under an obligation to provide an effective QoS in satisfying such an access arrangement, the need for a mobile operator to engage pro-actively and consistently in traffic management practices appears to be a necessity often driven by factors (whether driven by regulatory or competition law obligations) other than its own commercial strategy. The fact that this result has come about as a result of a form of competition policy intervention (*i.e.*, merger control) suggests that the principles governing traffic management should similarly take these consolidations into account.

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<sup>68</sup> Refer to Recital 22 and Article 6b of the *TSM Regulation*.

<sup>69</sup> In this context, refer to Case C-77/77, *Benzine en Petroleum Handelsmaatschappij BV v Commission*, *op. cit.*, where in times of capacity shortages, a dominant undertaking is able to favour its traditional customers. One can foresee that mobile operators will inevitably be striving to give effect to traffic management practices to relieve the pressure of “impending network congestion” that is usually associated with exceptional or seasonal spikes in traffic, many of which (*e.g.*, vacation destinations or large events) are associated with roamers from other Member States.

<sup>70</sup> For example, refer to the GSMA Intelligence Report, “The global MVNO footprint: a changing environment”, February 2015.

<sup>71</sup> Refer to Case No COMP/M.5650 - *T-Mobile / Orange UK*, of 1 March 2010; Case No COMP/M.6497 - *Hutchison 3G Austria / Orange Austria*, 12 December 2012; Case No COMP/M.7018 - *Telefonica Deutschland / E-Plus*, 2 July 2014; and Case No COMP/M.6992 - *Hutchison 3G UK / Telefonica Ireland*, 28 May 2014. It is also understood from publicly available sources, that similar remedies have been proposed by the parties in the pending mobile mergers before the Commission (see Case M.7612 - *Hutchison 3G UK / Telefonica UK*; and Case M.7758 - *Hutchison 3G Italy / WIND / JV*).

*c) Technical segmentation generated by deployment of 5G technology*

Last, and by no means least, the policy imperative to avoid an overly restrictive interpretation of Net Neutrality principles (e.g., the banning of “fast lanes” and other forms of special treatment, such as zero-rating) is clear, given that it could seriously undermine the current EU action plan to deploy 5G technology by 2020.<sup>72</sup>

The deployment of 5G technology will deliver virtually ubiquitous, ultra-high bandwidth “connectivity” not only to individual users but also to connected objects (foreseen in the *TSM Regulation* as “machine to machine” communications, as per Recital 16). A wide range of applications and sectors will be served in a 5G environment, including professional uses (e.g., assisted driving, eHealth, energy management, possibly safety applications). The result of increased demand will inevitably lead to greater challenges in network management. In the words of the United Kingdom’s 5G innovation Centre, 5G networks will be optimising traffic flows on the basis of “*user and network context information such as where, when, why, who and what is being requested*”.<sup>73</sup> In the words of one commentator: “*This seems completely incompatible with traffic management limited to technical requirements. Thus strictly drafted net neutrality guidelines may hamper Europe’s 5G aspirations*”.<sup>74</sup>

A unique feature of 5G technology is that it will allow for flexible transport programmability,<sup>75</sup> which facilitates the division of transport resources into multiple (isolated) slices or parallel channels. This will enable network operators to exploit their networks to optimise their resources across different segments of the available spectrum. The open question is whether mobile network operators will be able to manage their networks in such a way as to be able to implement Net Neutrality principles as between the separate capacity streams, especially given the surge in traffic loads and the number of connected devices that will be sustained in a 5G environment. One can anticipate in these circumstances a backhaul bottleneck occurring that goes well beyond the data capacity shortages experienced currently by customers in the wireless access segment.<sup>76</sup>

In such circumstances, with the advent of 5G technology challenging the basic working assumptions about how capacity can and should be managed, the risks of a Type I error that might occur as a result of unnecessary regulatory intervention are magnified significantly. Accordingly, an acknowledgement of the importance of traffic management techniques in the mobile sector sits most comfortably with the policy imperative of adopting a flexible approach to the issue of “discrimination” that is consistent with competition law principles. By contrast, excessive intervention is likely to distort competitive industry structures and business models in advance of the deployment of 5G technology by 2020, at which time

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<sup>72</sup> See the European Commission Press Release, “EU and Brazil to work together on 5G mobile technology”, 23 February 2016. Refer also to the Commission’s webpage “Towards 5G” (<https://ec.europa.eu/digital-single-market/towards-5g>).

<sup>73</sup> See Institute for Communication Systems 5G Innovation Centre (in association with University of Surrey), “5G Whitepaper: The Flat Distributed Cloud (FDC) 5G Architecture Revolution”, January 2016, at p.2.

<sup>74</sup> See R. Kenny, “Net Neutrality: Guidelines or straitjackets?”, EurActiv.com, 2 May 2016. (Available at: <http://www.euractiv.com/section/digital/opinion/net-neutrality-guidelines-or-straitjackets/>).

<sup>75</sup> For example, industrial sensors, self-driving cars and other emerging uses of the Internet have needs that cannot be satisfied by the operations of a “general-purpose” network.

<sup>76</sup> For example, refer to the Radio Access and Spectrum White Paper, “5G Radio Network Architecture”, 3 February 2014, at p. 14.

fundamental questions will need to be asked about the scope of the Net Neutrality concept. It seems to be counter-intuitive to establish a regulatory regime which may, at worst, come to an abrupt end in four years or, at best, require significant re-assessment at that time. The adoption of a competition policy-inspired approach runs for less risk of over-regulation for that interim period of four years, during which time the contours of Internet markets will have mapped the detail of regulatory intervention.

### 3. The Need to Take due Account of Welfare and Efficiency Considerations

Given the necessary policy trade-offs that need to be made in the implementation of the *TSM Regulation*, a sound policy direction will surely be one that maximises consumer welfare. In this regard, it would be too restrictive an approach to advocate that welfare would be maximised if net neutrality obligations were enforced expansively. While one could argue that such an expansive approach would maximise the welfare of those seeking specific forms of Internet access, such an approach would tend to ignore the welfare that would be created if mobile operators were permitted to expand their existing range of services and to innovate by delivering “specialised services”, along with the efficiencies generated by such services.<sup>77</sup>

To this end, Article 3(5) sets forth a clear message that “specialised services” are to be treated differently to Internet access services, whether it be for the provision of “mission critical” security, hospital and emergency-related services, on the one hand, or innovative services driven by QoS considerations, on the other. As noted above, the express wording of that provision is consistent with the view that the prioritisation of traffic driven by commercial considerations is permissible. By contrast, even though commercial considerations cannot determine traffic management decisions under the auspices of Article 3(3), welfare considerations should be relevant in determining the extent to which traffic “discrimination” can occur, even insofar as traffic management measures must satisfy the doctrine of proportionality and the concept of “objective justification” found under competition rules (see Recitals 8 and 9).<sup>78</sup>

The achievement of such efficiencies (actual and allocative) and welfare (direct and indirect) benefits will turn on the particular characteristics of any given industry at any point in its commercial, regulatory and technological evolution. For example, the dynamics of the aviation sector are generally considered under competition rules to be consistent with premium pricing as the basis of managing capacity constraints and as the basis for creating veritable ‘fast lanes’ for passengers.<sup>79</sup> Then again, selective *increases* in capacity in the

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<sup>77</sup> In the complex Internet ecosystem, efficiencies need not be limited solely to those flowing directly from any given practice. Thus, allocative efficiencies and dynamic efficiencies should both be taken into account. According to established economic thinking, allocative efficiencies occur where the resources in an economy or marketplace, for example (over the long-run), are funnelled directly to those consumers who are willing and able to pay for them, thereby eliminating wastage. In turn, dynamic efficiencies evolve from the idea that businesses which constantly compete with each other in the marketplace must continually research, invest, design and innovate to retain its consumers. Refer to the discussions in OECD Report, “The Role of Efficiency Claims in Antitrust Proceedings”, 2 May 2013 (DAF/COMP(2012)23).

<sup>78</sup> For a discussion of the various efficiencies and consumer welfare benefits flowing from particular commercial practices, see discussions in: K. Maniadaki, “EU Competition Law, Regulation and the Internet: The Case of Net Neutrality”, *op. cit.*, at pp. 45-49 and 281-284; and R. O’Donoghue & J. Padilla, “The Law and Economics of Article 102 TFEU”, *op. cit.*, at pp. 827-838. Refer also to footnotes 40 and 43 regarding the positive implications of discriminatory pricing.

<sup>79</sup> For example, refer to J. Faull & A. Nikpay, “The EU Law of Competition”, Oxford Publishing, 3<sup>rd</sup> Edition (2014), at pp 1792-1793. See Case COMP/39.596 - *British Airways/American Airlines/Iberia* (2010).

aviation sector, when put into effect by a dominant airline, are uniquely considered to be potentially foreclosing to new entrants.<sup>80</sup> By contrast, an increase in capacity would inevitably be seen in a pro-competitive light in the vast majority of industrial sectors. As regards the maritime sector, Commission Regulation EC No. 906/2009 provides that the activities of a consortium designed to effect capacity adjustments in response to fluctuations in supply and demand can benefit from an automatic exemption under Article 101(3) TFEU. Moreover, the recently, repealed Guidelines on the application of Article 101 TFEU to maritime transport services<sup>81</sup> expressed the view that an exchange of information between carriers that restricts competition may nonetheless create efficiencies, such as better planning of investments and the more efficient use of capacity. By the same token, the energy sector is characterised by capacity planning over a very long timeframe. As such, it is considered to be perfectly reasonable in an energy sector context for a competition authority to oblige operators with a dominant market position to plan their capacity in such a way as to reasonably accommodate wholesale access for retail competitors.<sup>82</sup> Such a policy, however, appears to be at odds with the Internet sector, which is characterised by numerous and relatively short innovation cycles and business models which also change rapidly.

In the context of the Internet traffic, especially given that so much of its commercial activity takes place in the context of a “two-sided” or “multi-sided” market,<sup>83</sup> the balancing of capacity concerns against commercial freedom is a much more complex exercise, requiring even more finely balanced policy trade-offs. The type of welfare analysis associated with the application of competition rules is, by definition, best equipped to deal with such issues, as such a scenario is especially prone to Type I errors.<sup>84</sup> Broader policy issues such as the prevention of piracy are also arguably better addressed by encouraging parties to enter into

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<sup>80</sup> See, for example, Case COMP/M.3940 - *Lufthansa/Eurowings* (2005); Case COMP/ M.6663 - *Ryanair/Aer Lingus III*, (2013); Case COMP/M 38284 - *Air France/Alitalia* (2004); Case No COMP/M.5440 - *Lufthansa/Austrian Airlines* (2009); Case No COMP/M.5335 - *Lufthansa/SN Airholding* (2009); and Case COMP/39.596 - *British Airways/American Airlines/Iberia* (2010).

<sup>81</sup> See the Guidelines on the application of Article 81 of the EC Treaty to maritime transport services, OJ C 245, 26.9.2008, pp. 2–14, at para. 58.

<sup>82</sup> For example, refer to Case AT.39315 - *ENI* (2010); Case AT. 39316 - *GDF* (foreclosure) (2010); Case AT. 39317 - *E.On* (gas foreclosure) (2010); Case AT. 39402 - *RWE* (gas foreclosure) (2009). See also to the merger Decisions above. Refer also to the example in the oil and gas sector, where the allocation of scarce supplies among existing customers was considered to be appropriate (see Case Case C-77/77, *Benzine en Petroleum Handelsmaatschappij BV v Commission op. cit.*, at footnote 39).

<sup>83</sup> A two-sided market (or platform) is where the firms on each side have to compete at the same time for two different types (or groups) of customers, while at the same time the demand from one of the groups of customers depends on the other and *vice versa* (*i.e.*, there needs to a balancing act between the various “sides” of the market in order to determine whether competitive harm is taking place). See Commission Decisions involving two-sided markets: Case No COMP/M.4523 - *Travelport/ Worldspan* (2007); Case No COMP/M.4731 - *Google/ DoubleClick* (2008); Case AT.34579 - *Mastercard* (2009); and Case COMP/39.398 - *Visa Europe MIF* (2010). In addition, search engines like Google involve multi-sided markets or platforms, as they involve Internet users, advertisers and content providers (see Case AT.39740 - *Google Search* (Decision pending)). Refer also to A. L. Pablo, “The double duality of two-sided markets”, by Jordan Publishing (2015) Comp Law 64. Refer generally to D. Evans, “The Antitrust Economics of Multi-sided Platform Markets”, *Global Competition Policy – Economic Issues & Impacts* (2014), LECG, at pp. 235-296. With regard to zero-rating and two-sided markets, refer to J. A. Eisenach, “The Economics of Zero Rating”, *op. cit.*, at p.6.

<sup>84</sup> For example, with regard to discriminatory practices (such as zero-rating), the effects of price discrimination will depend on whether the discrimination applies to individual content or categories of similar content (with the former being likely to be harmful and the latter likely to be competitive). Defining markets into unrealistically narrow segments is more likely to result in Type I errors.

agreements for premium or “specialised services”, thereby increasing the volume of genuinely traded goods (and thus lowering unit costs for producers and consumers). That perception is arguably further reinforced by the fact that the sector is already characterised by competition issues surrounding “big data”,<sup>85</sup> where concerns exist that first mover advantages result in markets that can ‘tip’ towards monopoly or the provision of services in ‘silos’ in the absence of certain market actors being able to provide premium services; in these circumstances, it is the subtlety and fact-specific nature of competition policy which is better equipped to achieve such policy balances, rather than *ex ante* regulation.

### ***Common commercial data plans***

Examples of the need for the type of flexibility afforded by EU competition rules in the application of Net Neutrality obligations becomes clearer when one examines the wide range of tariff/volume mobile packages available across a number of jurisdictions.<sup>86</sup> For example:

- (i) A so-called ‘***pure zero-rating***’ data plan might occur where an operator zero-rates a site for all of its customers, irrespective of their particular tariff plans with no data usage restrictions. These practices are more common within developing countries and are often driven by broader societal goals.<sup>87</sup> While it can be foreseen that such discriminatory practices might in theory be harmful to certain sites not benefitting from such a practice, this conclusion would be premised on the understanding that either: (a) the ISP and/or the preferred site hold market power; (b) the service being provided is not replicable by competitors; (c) predation is involved, insofar as there is no cost incurred by another means that is commonly understood as a ‘cost’ in the industry; (d) foreclosure of the sites affected actually occurs or is likely to occur; (e) end-users accept the level of foreclosure of sites involved; or (f) customer switching is not feasible. It is not therefore surprising that the Regulation has not seen fit to prohibit zero-rating expressly, given that is a form of discriminatory pricing that will most often produce real benefits to consumers, while on a worst-case scenario raising the foreclosure concerns that one associates with predatory

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<sup>85</sup> As regards antitrust concerns in “big data”, the UK’s Competition and Markets Authority (“CMA”) has recently published a report (“[The commercial use of consumer data Report on the CMA’s call for information](#)”, June 2015), while the European Commission and [Germany’s Federal Cartel Office](#) have begun to consider the issue in the context of recently announced investigations. The French and German National Competition Authorities have also announced (at the end of 2015) reviews of the significance of big data. Refer also to Bloomberg article, “Facebook’s Data Dominance Risks European Antitrust Clampdown”, 2 March 2016; *cf.* Dow Jones Business News, “EU Mulls New Rules on Data Collection”, 25 February 2016; *cf.* Preliminary Opinion of the European Data Protection Supervisor, “Privacy and competitiveness in the age of big data: The interplay between data protection, competition law and consumer protection in the Digital Economy”, March 2014; See also, D. Sokoll & R. Comerford, “Does Antitrust Have A Role to Play in Regulating Big Data?”, 27 January 2016; *cf.* The Antitrust Source, “No Mistake About It: *cf.* The Important Role of Antitrust in the Era of Big Data”, April 2015; *cf.* Competition Policy International, “The Problems and Perils of Bootstrapping Privacy and Data into an Antitrust Framework”, by G. Manne, May 2015.

<sup>86</sup> The author wishes to thank the GSM Association for providing him with access to a range of examples of mobile business offers which raises *prima facie* Net Neutrality issues. Refer also to BEREC “Report on OTT services”, January 2016 (BoR (16) 35), at 6.4, which lists the European jurisdictions which have banned zero-rated services in different contexts.

<sup>87</sup> For example, one operator provides free education services to its customers, which is similar to the current social welfare practice of providing free access to charity or health helplines (<http://www.vodacom.co.za/vodacom/services/e-school>).

pricing. A variant of pure zero-rating includes, for example, is the situation where a specific service application is provided by a mobile network operator, with data usage not being debited against the end-user's data plan.<sup>88</sup> This latter type of practice is common among mobile network operators and enables them to provide their customers with access to certain ancillary services which would otherwise not be provided or, if provided, would be unlikely to justify the payment of a fee. Where such ancillary services either do not attract a market price or merely accompany primary services already offered under competitive terms, the risks to Net Neutrality associated with such services seem negligible.<sup>89</sup>

- (ii) The funding by a content provider of free data for its customers, available to all content providers is often referred to as a '*sponsored data plan*' (e.g., sponsored data plans apply to a site such as Youtube on an individual basis, but not to other similarly placed online video platforms).<sup>90</sup> In the United States, for example, there are currently available commercial practices whereby customers can earn extra free data by responding to marketing surveys and/or shopping online with various brands.<sup>91</sup> These types of business models are not obviously discriminatory on their face, and are most likely to enhance competition as between mobile operators. Whether they are capable in certain exceptional circumstances of raising entry barriers which foreclose entrants (e.g., where the provision of free access is provided only to a discrete number of mobile application services) and thereby harm consumers by limiting their choices, is something which will turn on the specific facts of the offer in light of market dynamics.
- (iii) While the *TSM Regulation* has not prescribed any particular behaviour for ISPs in relation to **bundled services**, BEREC has identified that there are "*bundling practices where a content service is included as part of a package along with Internet access, but there is no differentiated treatment of the specific content's data traffic in the sense that traffic to this specific content still counts towards [...] data usage*".<sup>92</sup> In some Member State markets, it is a common practice for mobile operators to "*combine their offers with content platforms which provide video streaming*" (e.g., TV channels) and/or music streaming.<sup>93</sup> Such practices

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<sup>88</sup> For example, a pan-European mobile operator provides a "my Vodafone" application in Europe (which provides information about billing) and its "Net Perform" application (which provides information about the quality of the network) are both offered for free (i.e., the data usage does not count against the customers data plan) to that operators' customers.

<sup>89</sup> For example, it is difficult to conceive as to how the provision of [Wikipedia Zero](#) for free, given its widespread availability and educational motivation, could conceivably amount to a problematic example of zero-rating. (Wikipedia Zero is a zero-rated service which allows end-users to access Wikipedia free of charge on their mobile handsets - with the object of increasing access to free knowledge for those in developing countries).

<sup>90</sup> For example, in India, a platform offered users free access to certain [mobile applications](#) and services from companies which had signed up with the operator in question.

<sup>91</sup> For example, the [program>Data Perks](#) in the US allows customers to earn extra data by responding to marketing from brands; as does the [FreeBee](#) service.

<sup>92</sup> Refer to BEREC Report "How do Consumers Value Net Neutrality in an Evolving Internet Marketplace? A report into ecosystem dynamics and demand-side forces" ("BoR (15) 65"), June 2015, at p. 31.

<sup>93</sup> Refer to BoR (15) 65 at p. 35.

would not be regarded as a zero-rated offer that would raise concerns about the network not being managed in a neutral manner.<sup>94</sup> **Bundling practices** by mobile operators seem to be both popular and widespread. In the absence of a positive finding that the ISP in question holds market power, or because of the foreclosing effect brought about by bundling agreements between ISPs and a content/apps/site provider, it is difficult to identify where a competitive mischief or market failure would materialise. Thus:

- Mobile operators might, for example, combine the price of the data and content with a music offer, in return for specific tariffs or as an add-on option.<sup>95</sup> One can imagine that those customers which wish to maximise their music listening experience within the bundled offering will feel aggrieved if a strictly applied non-discrimination rule by a mobile operator will mean that their preferred content is only capable of being offered at a bit rate which does not maximise their listening experience while simultaneously providing them with services at optimal bit rates which they do not consider to be a priority. If one relies on competition law to address a truly anti-competitive effect of such a practice, however, where appropriate one could seek to apply a margin squeeze test across the whole package or target a predatory pricing action directed at a particular “service” within the bundle (rather than targeting a more broadly defined “market” represented by the bundle).<sup>96</sup>
- There might also be services where a mobile operator might wish to exclude its own services from the data cap specified in the contracts with a user and offer them for free.<sup>97</sup> One can envisage that, under certain market conditions, such a practice might allow operators to gain a significant competitive advantage over their competitors through a *de facto* discrimination against competing services. However, one

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<sup>94</sup> Refer to BoR (15) 65 at p. 21. Thus, there has to be a case-by-case assessment as to whether or not the bundling practice in question amounts to an abuse of a dominant position which is successfully monitored *via ex post* competition law rules. Refer also to the Communication from the Commission, Guidance on the Commission's enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings, OJ C 45, 24.2.2009, pp. 7–20; Case T-201/04 *Microsoft v Commission* [2007] ECR II-3601; Case T-30/89 *Hilti v Commission* [1991] ECR II-1439; and Case T-83/91 *Tetra Pak International v Commission (Tetra Pak II)* [1994] ECR II-755. With regard to mergers, see: Case T-5/02, *Tetra Laval v Commission* [2002] ECR II-04381; Case C-12/03 P, *Commission v Tetra Laval* [2005] ECR I-987; and Case T-210/01, *General Electric v Commission* [2005] ECR II-5575.

<sup>95</sup> For example, a German ISP offers [unlimited Spotify](#) at a fixed monthly price of 9.99 euros. A competitor has a [similar offer](#), but as of 28 April 2016 has not been offering data at full speed for Spotify once customer's monthly data plans are fully utilized; instead, it will reduce the speed to 64 Kbps, as with other services (apparently in order to comply with the terms of Recital 7 of the *TSM Regulation*).

<sup>96</sup> The advantage of bringing a predatory pricing action within the EU (as opposed to the US), is that a complainant need not prove that the dominant firm is capable of recouping its profits. In an environment in which an undertaking leverages its market power as between related markets, this rule lowers the burden for complainants to bring a predatory pricing action.

<sup>97</sup> For example, in the United States, offers have been made by [Comcast](#) to stream video *via* the Stream TV service without the streaming video service eating into its customers' monthly data caps (although, strictly speaking, this offer is made *via* cable rather than over the Internet). [Verizon](#) also allows its customers to view its own streaming video service, Go90, without this service eating into customer data caps.

can even more easily envisage that, in the absence of market power on the part of the ISP, preference being accorded to one's own content in this manner will be more likely to yield positive consumer benefits. Consequently, the overall effects of the discrimination on the market will need to be weighed against the consumer's benefit.

- Mobile network operators can offer their customers data bundles based on the type of content being accessed *e.g.*, video, music *etc.*<sup>98</sup> To the extent that the individual inputs are otherwise accessible, customer switching between mobile operators is possible, and customers ultimately have freedom of choice in selecting their specialist video-based providers, such practices will in all likelihood be considered to generate consumer welfare. However, the existence of *de facto* exclusivity with respect to certain services might mean that most such practices could be addressed through an action under Article 101 TFEU due to the potential of such an arrangement to have an anti-competitive effect.<sup>99</sup>
- Insofar as mobile network operators might offer data bundles based on selected third party content,<sup>100</sup> a competition law analysis would assess the legality of such practices by reference to traditional leveraging theory, either as part of a tying/bundling analysis or as part of a “conglomerate effects” approach, or even as part of a or predation action; such causes of action would be able to proceed under an Article 101 TFEU action in the vast majority of cases, given the existence of third party content (thereby establishing the “agreement” between an ISP and third party content provider as an essential element of the action).

As is reflected in the indicative list of business models/tariff plans discussed above, a proportionate response from regulators acting under the *TSM Regulation* requires that the

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<sup>98</sup> For example, refer to the [Binge On service](#), which allows customers to stream unlimited video from certain services without it counting against their monthly data cap (as part of a more expensive data tariff). In addition, any video service can apply to be part of this offer, subject to the standard technical requirements which allow the operator in question both to identify and manage traffic. Another interesting aspect of the service is that the operator has reportedly opted to offer video to all of its customers that subscribe to the service package in exchange for lower quality (not being restricted merely to the video services forming part of the overall offer, but in relation to all video services). In turn, customers have the opportunity to de-select specific video providers of their choice so as to improve the quality of their streaming, with video providers having no influence over a customer's choice.

<sup>99</sup> See, for example, COMP/C.2/37.398 - *Champions League* [2003] OJ L 291/25, COMP/C.2/37.214 - *Bundesliga* [2005] OJ L 134/46 and COMP/38.173 - *Premier League* [2008] OJ C 7/18.

<sup>100</sup> For example, a company such as Mobistar in [Belgium](#) offers a plan which gives users zero-rated Facebook, Twitter and Netlog (a local social network), as well as free access to its own mobistar.be domain (these sites are actually ‘fair-use’ capped at 1GB data per month). Further, in [Lithuania](#), there is an offer of unlimited mobile Internet through Facebook and news portals “Delfi.lt, 15min.lt, Lrytas.lt and Vz.lt” free for 12 months, followed by a €1,00 monthly rate thereafter. In addition, in [Sweden](#), Tre offers Streaming music from certain music streaming services (Spotify, Tidal, Deezer) up to 70 GB per month for free and usage does not decrease the customer's regular data volume. In addition, Etisalat Nigeria offers customers “smartpaks”, which provide unlimited access (subject to their fair use policy) to specific sites. One option is the “social me” smartpak, which can be purchased on a weekly basis for ₦300 and which provides access to Facebook, Twitter, BBM, Instagram, Eskimi, and “all instant messaging apps.”

market-specific context of each impugned commercial practice be taken fully into account when determining whether intervention is necessary and the nature of that intervention. While recourse to competition rules has the potential of addressing a range of potential anti-competitive concerns and market failures, should they arise in practice, market experience also suggests that end users are well served by many such business models/tariff plans in practice. A failure to embrace competition principles as the basis for the assessment of the compatibility of such practices under the *TSM Regulation* will inevitably expose regulatory decision-making to the risk of over-regulation (or a Type I error).

#### 4. Competition Tools Sufficient to Address Perceived Market Failures

Those critics of a competition law-based approach being adopted as the basis of Net Neutrality obligations will no doubt espouse the view that the *TSM Regulation* establishes its own *sui generis* rights which are separate and distinct from competition rules and which address public policy issues beyond those relating to market power, whereas the focus of competition rules in a Net Neutrality context would be restricted to a much narrower range of issues arising from the exercise of market power reflecting market dominance.<sup>101</sup> However, this approach is neither supported by the terms of the *TSM Regulation* itself nor by the scope of competition rules.

*First*, as noted above, the *TSM Regulation* in effect establishes a clear anti-competitive classification for the practices of blocking and throttling. In many respects, this characterisation in effect enshrines these practices as “by object” infringements, given the overarching policy goal of achieving connectivity for consumers to the open Internet. In doing so, an *ex post* standard is established which is based on an *ex ante* rationale – the need to ensure connectivity.

*Second*, the *TSM Regulation* establishes an approach which in effect endorses the applicability of an “effects-based” test to assess the compatibility of other measures. In doing so, it is able to take into account a range of factors which are consistent with the broad application of competition law principles.

*Third*, the references to problematic “agreements” in the legislation make it clear that the logic of Article 101 TFEU can play a significant role in the application of the prohibition on non-discrimination (whether or not effected through traffic management measures) found in the *TSM Regulation*. Thus, relevant theories of harm that might arise from problematic practices affecting Net Neutrality can be dealt with under both Articles 101 and 102 TFEU, both of which contain express references to discrimination and tying practices as actionable infringements under both Treaty provisions.<sup>102</sup>

In practical terms, this means that key elements of the Net Neutrality rules would be caught irrespective of whether an operator held a position of market dominance (Article 102) or whether those practices were implemented through an agreement or tacit arrangement between separate undertakings in the Internet value chain (Article 101) either in a vertical,

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<sup>101</sup> See K. Maniadaki, “EU Competition Law, Regulation and the Internet: The Case of Net Neutrality”, *op. cit.*, at Chapter 7.

<sup>102</sup> See P. Larouche, “Network Neutrality: The Global Dimension”, TILEC Discussion Paper No. 2011-035, 15 August 2011, which maintains that EU Competition law rules are more than capable instruments to address concerns of network discrimination. Refer also to M. Cave & P. Crocioni, “Net neutrality in Europe”, *op. cit.*, at p. 65.

horizontal or neighbouring market relationship with one another, as long as the impact of the impugned practices on the marketplace is significant.<sup>103</sup> Indeed, a recent merger precedent pays testimony to the fact that central to most concerns in the context of Net Neutrality is the relationship enjoyed between network provider, on the one hand, and content/app/site provider on the other, rather than simply those concerns relating to an ISP's unilateral behaviour.<sup>104</sup>

The fact that these types of practices have not been addressed under Article 101 TFEU in Community case-law over a number of years can be explained by reference to the fact that much of the Community's Article 101 practice was covered by the "soft law" guidance provided by a range of Block Exemption Regulations since the 1970s,<sup>105</sup> while the more recent decentralisation policy in the enforcement of the vast majority of Article 101 actions to Member State level since 2003 has meant that Community level enforcement of Article 101 actions has shifted to the Member States.<sup>106</sup> Aside from the caveats regarding the need for such arrangements to not be merely *de minimis* in their effect and the need to satisfy a rule of reason analysis<sup>107</sup> (see discussion on Recital 7 above), it is indeed the case that practices that could be problematic from a competition law perspective will quite often take the form of vertical agreements between parties in different parts of the Internet value chain.<sup>108</sup>

<sup>103</sup> Refer to Recital 7 of the *TSM Regulation*.

<sup>104</sup> Prior to the adoption of the *TSM Regulation*, the Commission was able to deal with Net Neutrality issues indirectly through its merger review powers. Thus, in Case No COMP/M.7000 - *Liberty Global/Ziggo* (2014), the Commission examined the underlying competition concerns affecting merging cable TV providers in the Netherlands. Having identified possible concerns regarding the satisfaction of Net Neutrality obligations (*i.e.*, alleged prioritisation of own/and/or third-party services, throttling, blocking the restriction of interconnection capacity, network congestion, access to content providers *etc.* – refer to para. 521), the merging parties accepted "*a commitment, for a period of four years after the adoption of this Decision, not to contractually restrict, directly or indirectly, the possibility for broadcasters who are carried on the merged entity's TV platform to distribute their content via an OTT service; and in order to ensure the effectiveness of this commitment and of the distribution of content via OTT services, the Notifying Party also committed for a duration of four years, to maintain sufficient interconnection capacity between its Internet network covering the Netherlands and third-party providers of transit services*" (at para. 524 of the Decision).

<sup>105</sup> For example: *Vertical Agreements*: Council Regulation No 19/65/EEC of 2 March 1965 on application of Article 85 (3) of the Treaty to certain categories of agreements and concerted practices, OJ 36, 6.3.1965, pp. 533–535; *cf.* Council Regulation (EC) No 1215/1999 of 10 June 1999 amending Regulation No 19/65/EEC on the application of Article 81(3) of the Treaty to certain categories of agreements and concerted practices, OJ L 148, 15.6.1999, pp. 1–4; *cf.* Commission Regulation (EC) No 2790/1999 of 22 December 1999 on the application of Article 81(3) of the Treaty to categories of vertical agreements and concerted practices, OJ L 336, 29.12.1999, pp. 21-25; *cf.* Commission notice - Guidelines on Vertical Restraints, OJ C 291, 13.10.2000, pp. 1-44; *cf.* Commission notice - Guidelines on Vertical Restraints, OJ C 130, 19.05.2010, pp. 1.

<sup>106</sup> The Commission's decision to re-allocated competition enforcement powers under EU competition law down to the Member State level is enshrined in Council Regulation (EC) No 1/2003 of 16 December 2002 on the implementation of the rules on competition laid down in Articles 81 and 82 of the Treaty, OJ L 1, 4.1.2003, pp. 1–25.

<sup>107</sup> For example, refer to F. Marini-Balestra and R. Tremolada, "The EU Debate on Net Neutrality: What About Zero-Rating?", ((2015) C.T.L.R., [Issue 5](#)), who echo other commentators' views that a 'rule of reason' approach could be used in the EU so as to identify abusive practices such as zero-rating or other paid prioritised services.

<sup>108</sup> In the context of selective distribution agreements falling under Article 101 TFEU, a significant body of administrative practice has developed regarding the techniques relied on by manufacturers to develop objective quantitative standards which justify the special treatment of certain products capable of being classified as capable of being distributed through a selective distribution network. See the Commission's Guidelines on Vertical Restraints (OJ C 130, 19.5.2010, pp. 1-46) provide that certain suppliers (to preserve  
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*Fourth*, as regards the possibility of action being taken under the *TSM Regulation* to address a potentially anti-competitive zero-rating policy,<sup>109</sup> it is clear that such a practice would only be likely to foreclose competitors if put into effect by an undertaking with market power, as would be the case with all below-cost pricing strategies.<sup>110</sup> Having said that, its wider implications can be addressed as a particular embodiment of the non-discrimination principle policy, which means that traditional jurisprudence and administrative practice dealing with the principle of non-discrimination can serve as the basis for assessment. Where that alleged discrimination involves a third party, Article 101 TFEU would also offer regulators the possibility to take appropriate action where a significant portion of the relevant market was affected even though market power was absent.<sup>111</sup>

*Fifth*, where the zero-rating practice of an ISP concerns the provision of ancillary services by that ISP, traditional antitrust thinking on the competitive implications of “aftermarkets” might be most appropriate. Seen in this light, the competitiveness of the market in the provision of a primary service should lead to the conclusion that services offered in support of such a primary service are either part of the bundled service offering of the provider or unlikely to result in anti-competitive effects given the level of competition occurring in the provision of the primary service(s) in question.<sup>112</sup>

*Sixth*, Article 102 TFEU could also be relied upon as the basis upon which to address a range of issues that would arise from the leveraging of market power by an ISP from one market into another adjacent or neighbouring market, including leveraging resulting in “conglomerate effects” brought about by the existence of a “must have” product in the

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their brand image) may wish to “impose [minimum] quality standards by imposing a certain measure of uniformity and quality standardisation on the distributors, thereby increasing the attractiveness of the product to the final consumer” (at para. 107(i)). Such restrictive agreements benefit from the Block Exemption (Commission Regulation (EU) No 330/2010 of 20 April 2010 on the application of Article 101(3) of the Treaty on the Functioning of the European Union to categories of vertical agreements and concerted practices, OJ L 102, p. 23.4.2010. 1).

<sup>109</sup> Refer to J. A. Eisenach, “The Economics of Zero Rating”, *op. cit.*, who underlines that the current zero-rating models observed in practice do not appear to raise any significant competition concerns, namely because: (i) most zero-rating programs are carrier initiated and do not involve payments to carriers by the providers of the zero-rated content; (ii) in sponsored data programs where content providers are providing payments to carriers, there appears to be no evidence that such arrangements involve exclusivity; and (iii) there is no *prima facie* basis for concluding that zero-rating programs involving exclusivity would be anti-competitive.

<sup>110</sup> For example, see Case COMP/38.233 – *Wanadoo Interactive* (2003); Case T-340/03, *Telecom v Commission* [2007] ECR II-107; Case T-339/04, and Case C-202/07, *France Telecom v Commission* [2009] ECR I-02369.

<sup>111</sup> Only a situation leading to the charging of excessive prices would be likely to be problematic because, as M. Cave & P. Crocioni, explain in “Net neutrality in Europe”, *op. cit.*: “*Ex ante* intervention is currently inappropriate as there is no evidence of ISPs charging CAPs. In the future, even if they started to do so, this would not necessarily be a concern. For example, absent restrictions a two-tiered system could emerge with prioritised access offered for a fee and best efforts access remaining free. A concern about a competitive bottleneck would probably arise only if ISPs started to charge a “high” price for best efforts.

<sup>112</sup> Under such an approach, dominance in the primary market would be critical in determining whether abusive behaviour is possible in an aftermarket. Refer to Case No IV/34.330 - *Pelikan / Kyocera* (1995); Case IV/E-2/36.431 – *Info-Lab/Ricoh* (1999); and Case COMP/C-3/39.391 – *EFIM* (2009) (Decision upheld on appeal to the General Court in Case T-296/09, *EFIM v Commission* [2011] ECR II-425).

portfolio of a dominant ISP.<sup>113</sup> In these situations, it is highly unlikely that any competitive harm that might result from such practices would occur in the absence of market power being exercised.

*Seventh*, the issue arises as to whether or not competition rules can deal adequately with the situation where an ISP confers a preferential treatment upon its own services at the expense of those offered by third parties. This issue lies at the heart of the Commission action brought against Google for its alleged abuse of Internet search through its discriminatory practices favouring its own range of related services or those of its preferred trading partners. As Petit has forcefully argued, there are a number of strands of EU competition law jurisprudence which establish a duty on a dominant firm not to prefer its own services, without the need for competition authorities (and regulators) to prove that the party engaging in such conduct owns an “essential facility”.<sup>114</sup> The likelihood is that preferential treatment will only be truly problematic in practice if it is engaged in by a party with true market power, which should mean that Article 102 TFEU is the appropriate means through which such conduct could be

<sup>113</sup> According to Article 14(3) of the *Framework Directive op cit.*, leveraging is defined as: “where an undertaking has significant market power on a specific market, it may also be deemed to have significant market power on a closely related market, where the links between the two markets are such as to allow the market power held in one market to be leveraged into the other market, thereby strengthening the market power of the undertaking”. Conglomerate effects are considered by the Commission within the context of its analysis of vertical mergers. The relevant passages of the Commission’s Notice on the Guidelines on the Assessment of Non-horizontal Mergers (2008/C 265/07 of 18.10.2008) (“Commission Notice”) can be found in paras. 93-118. Para. 93 of the Commission Notice states that: “The main concern in the context of conglomerate mergers is that of foreclosure. The combination of products in related markets may confer on the merged entity the ability and incentive to leverage a strong market position from one market to another by means of tying or bundling or other exclusionary practices. Tying and bundling as such are common practices that often have no anticompetitive consequences. Companies engage in tying and bundling in order to provide their customers with better products or offerings in cost-effective ways”. See Case T-5/02, *Tetra Laval BV v Commission* [2002] ECR II-4381; Case T-210/01, *General Electric Company v Commission* [2005] ECR II-5575. As regards the treatment of “must have” products, paragraph 99 of the Commission Notice states that: “In order to be able to foreclose competitors, the new entity must have a significant degree of market power, which does not necessarily amount to dominance, in one of the markets concerned. The effects of bundling or tying can only be expected to be substantial when at least one of the merging parties’ products is viewed by many customers as particularly important and there are few relevant alternatives for that product, e.g. because of product differentiation or capacity constraints on the part of rivals”. For example, see Case No COMP/M.1681- *Akzo Nobel/ Hoechst Roussel Vet*, the Commission identified possible portfolio power concerns when at least one of the products was a “must stock” item; Case No COMP/M.1601- *Allied Signal/Honeywell*; and Case IV/M.1355 - *Newell/Rubbermaid*. Refer also to B V. Roosebeke, “Net Neutrality: How European Rules can Foster Innovation: 6 Recommendations”, CEPInput, August 2015, at section 3.6, who states that: “none of the non net neutral behaviour of internet services providers (ISPs) provokes an obvious and direct need for regulation. An intervention may well be necessary in case of abuse of significant market power of ISPs. Such a scenario is (1) unlikely in the EU and (2) can well be coped with by applying EU competition law or existing ex-ante access regulation”.

<sup>114</sup> Refer to N. Petit, “Theories of Self-Preferencing Under Article 102 TFEU: A Reply to Bo Vesterdorf”, 29 April 2015, SSRN Academic Papers portal, at pp.3-7, where it is argued that there are several legal bases upon which a dominant firm that gives preference to its own operations can be found liable of an unlawful abuse, and which can give rise to the imposition of direct or indirect duties not to grant such preference: (i) discrimination (see Case T-229/94, *Deutsche Bahn AG v Commission*, ECR [1997] II-1689; Case C-242/95, *GT-Link A/S and De Danske Statsbaner (DSB)* ECR [1997] ECRI-4449; and Case COMP AT. 39.388, *German Wholesale Electricity Market (E.ON)* (2008)); (ii) tying (see Case T-201/04, *Microsoft v Commission* ECR [2007] II-03601); (iii) unfair Pricing (see Case IV/26699 - *Chiquita* (1975)); and (iv) other legal avenues such as that derived from Case T-65/98, *Van den Bergh Foods Ltd v Commission*, [2003] ECR II-4653). The Petit article was written in response to Bo Vesterdorf’s paper, “Theories of Self-Preferencing and Duty to Deal - Two Sides of the Same Coin”, 1(1) Competition Law & Policy Debate, 4 (2015).

challenged. Moreover, there is an established body of precedent which is consistent with the view that parties which have established relationships of supply and which generate a relationship of dependency with their supplied customers, are much more compromised in taking any decision to terminate such longstanding supply relationships, irrespective of whether they are at the time of the relevant termination of supply “dominant” in a relevant market.<sup>115</sup>

*Finally*, it must be open to question whether any approach other than one based on competition rules is capable of addressing the myriad of complex competitive relationships created by the emergence in the Internet value chain of so-called OTT (“over-the-top”) operators – namely, service providers which do not operate a telecommunications network, but use the Internet to deliver their services (*e.g.*, MMS, voice messages, videos, text, images *etc.*), and whose number includes undertakings such as Google, Facebook, Skype. It is indisputable that, as mobile devices continue to proliferate, an increasing amount of Internet traffic is going to be constituted by video-based services and applications. While the success of OTT services inevitably benefits operators because it allows them to attract subscribers for broadband services, the proliferation of OTT services also has the potential to congest mobile networks, while at the same time competing with operators’ own services.<sup>116</sup>

Accordingly, a delicate balancing of competition concerns against welfare gains needs to be taken into account by any regulator dealing with Net Neutrality issues which affect OTT providers (including their ability to exercise countervailing bargaining power *vis-a-vis* ISPs). In these circumstances, it is appropriate that the lens through which theories of harm need to be focused, and through which the role and impact of OTTs needs to be understood, is that of competition policy; an overview of existing marketplace offerings (see above) illustrates the range of consumer welfare issues that need to be taken into account in implementing such an approach.

#### IV. Conclusions

A review of the actual terms and structure of the Net Neutrality provisions of the *TSM Regulation* and its Recitals, a consideration of the public policy drivers underpinning that legislation, and an understanding of the industry realities underlying the need for traffic management techniques, lead the author to conclude that the only sound analytical basis upon which the *TSM Regulation* can be interpreted and applied is one that is in accordance with competition principles. Beyond these competition principles, the practices of blocking and throttling are addressed in detail in the *TSM Regulation*. However, the adoption of a doctrinaire *ex ante* approach going beyond blocking and throttling practices would find itself extremely vulnerable to over-regulation or Type I errors, which could ultimately be harmful to consumer welfare and the process of innovation.

Nowhere is that vulnerability to a Type I error more starkly exposed than in the application of the Net Neutrality principles in the *TSM Regulation* to the mobile sector. The danger of Type I errors being made is exemplified by the fact that even India’s prohibition of zero-rating

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<sup>115</sup> Refer to paras.78 and 84 of the Commission’s Guidance on the Commission’s enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings, OJ C 45, 24.2.2009, pp. 7–20. In this regard, see also debate taking place on the K. Coates blog: (<http://www.twentyfirstcenturycompetition.com/2013/10/the-estoppel-abuse/>), as cited in N. Petit, *op. cit.*, at p. 8 (footnote 34).

<sup>116</sup> See BEREC “Report on OTT services”, January 2016 (BoR (16) 35).

practices, on the one hand, is limited to a period of only two years (after which time the position will be reconsidered in light of market developments),<sup>117</sup> while the adoption of a self-regulatory Code of Conduct for Net Neutrality in the United Kingdom since 2012, on the other, has created a ‘soft’ regulatory environment that has not given rise to any credible anti-competitive concerns in the market over that period.<sup>118</sup>

Those who advocate that Net Neutrality non-discrimination principle constitutes a blanket rule which must be applied without discretion are in effect ignoring the close relationship that exists within the EU between *ex ante* and *ex post* disciplines. Given the fundamental re-thinking of the EU electronic communications Regulatory Framework which is taking place over the course of 2016, and the wide range of commercial relationships evolving across the Internet value chain, policy-makers are best advised to adopt an enforcement strategy which is at the very least closely aligned to an *ex post* approach.

Steering a coherent policy direction across the whole territory of the EU, given the broad nature of some of the obligations set forth in the *TSM Regulation*, requires the inherent flexibility of competition rules, especially in terms of their ability to balance welfare and efficiency benefits against losses to competition. Moreover, what needs to be better understood (and will be, over time) is that a competition-style approach to Net Neutrality is better able to address the range of potential anti-competitive effects that might flow from agreements or commercial relationships which involve market actors *other than ISPs*. By contrast, a narrowly constructed *ex ante* approach which purports to cover a multitude of commercial practices through blanket prohibitions of certain types of conduct (as opposed to a discrete and well understood forms of access or interconnection in the traditional world of telecommunications), only succeeds in skewing competitive dynamics in a classic multi-sided market such as the Internet. It does so by artificially constructing theories of market failure solely by reference to the responsibilities born by ISPs.<sup>119</sup> However, given the interplay of many complex factors and many diverse market actors in the provision of Internet-based services, recourse to a traditional regulatory approach raises significant risk that a Type I error could occur.

What remains at stake is whether the members of BEREC – at least where they do not benefit from dual competition powers - are equipped to effectively apply competition law standards. The various pronouncements of BEREC in the recent past *inter alia* on bundling practices, the role of OTTs, Internet access quality, differentiation practices, and traffic management, suggest that the task is not beyond them (whether acting alone, or in partnership with their

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<sup>117</sup> Refer to the Financial Times articles: “Facebook’s Internet.org effort hits India hurdle”, 16 April 2015; and “Facebook suffers a painful history lesson”, February 2016. The provision of such services have been subsequently banned in India under their [new regulations](#) adopted in February 2016: “Prohibition of Discriminatory Tariffs for Data Services Regulations, 2016”, 8 February 2016. In other words, the implicit recognition is that a Type I error might be irreversible unless a short-term opportunity was not afforded to the regulator to wind back regulation.

<sup>118</sup> Refer to the “Open Internet Code Of Practice: Voluntary Code of Practice Supporting Access To Legal Services And Safeguarding Against Negative Discrimination on the Open Internet” 25 July 2012 (it has been subsequently amended in 2014 and is available at: <http://www.broadbanduk.org/wp-content/uploads/2015/07/BSG-Open-Internet-Code-of-Practice-amended-November-2014.pdf>). The suggestion is that basic principles of self-regulation which reflect normative standards have been sufficient, for over 5 years, to prevent any anti-competitive conduct in the context of Net Neutrality policy.

<sup>119</sup> Thus far, the so-called SMP regime has focussed on bottleneck access problems, rather than on multi-sided markets.

Competition Authority counterparts). However, NRAs will need to act in ways which are removed from their traditional focus on narrowly focussed, nation-specific issues, and they will need to embrace ideas about consumer welfare and efficiencies which are have not sat comfortably alongside *ex ante* enforcement practices over the past few decades.

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